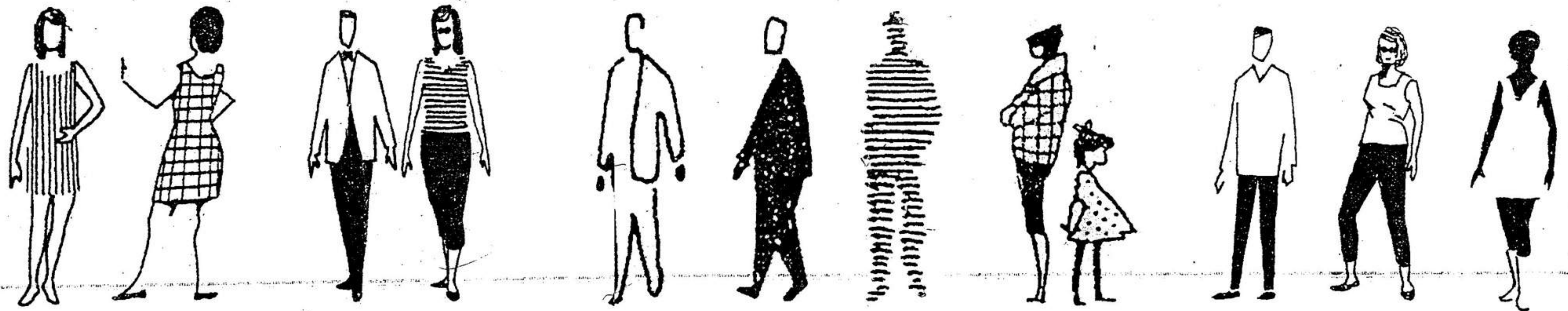
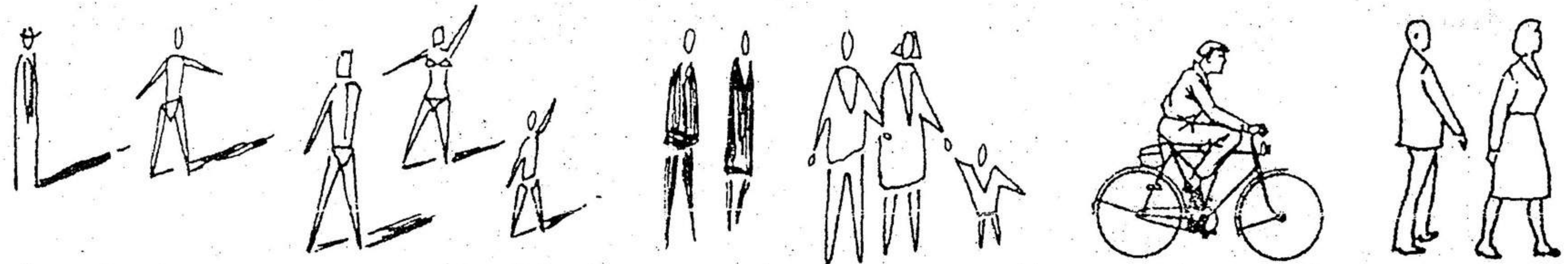


ARCHITECTURAL PRESENTATION

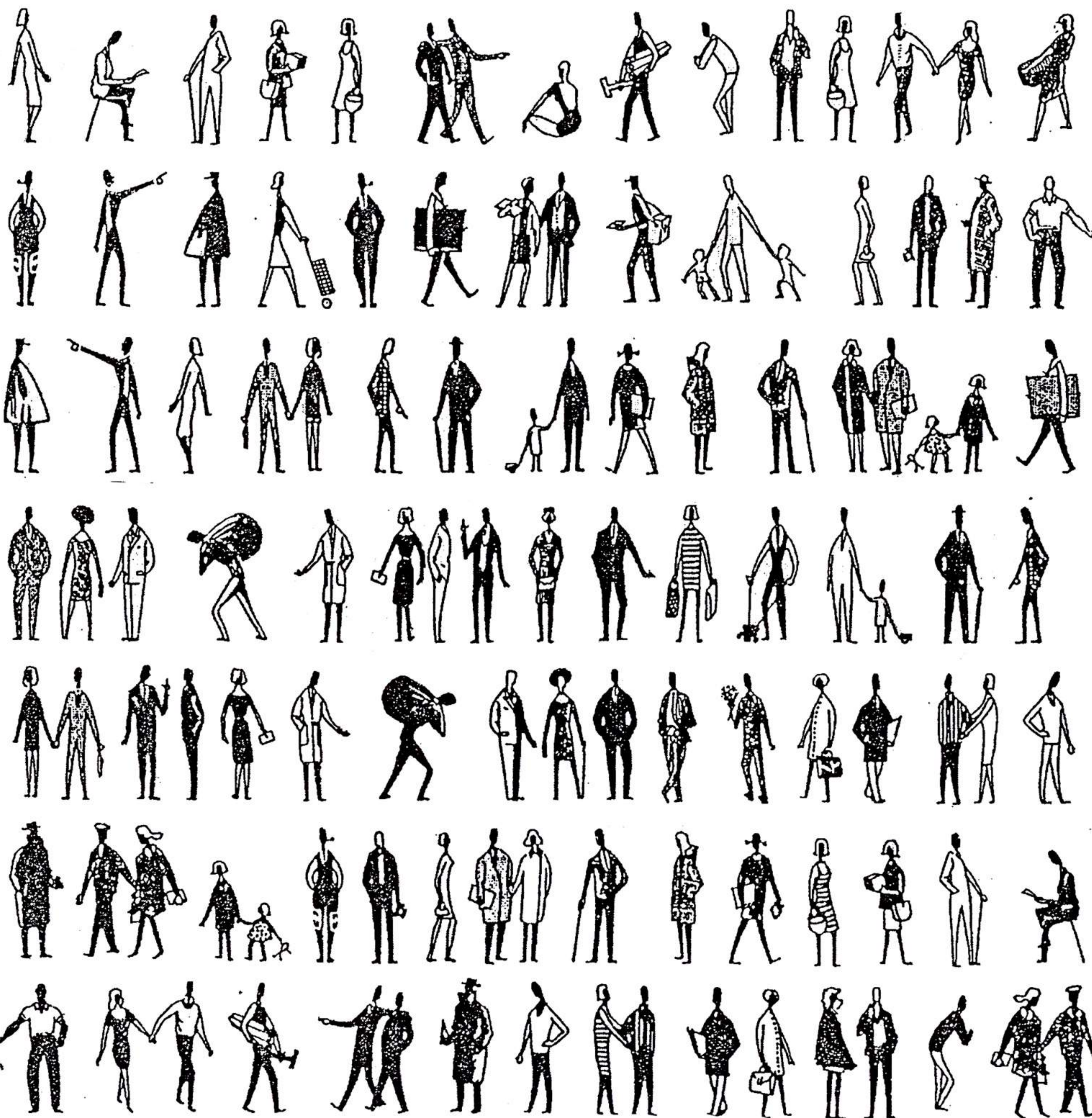
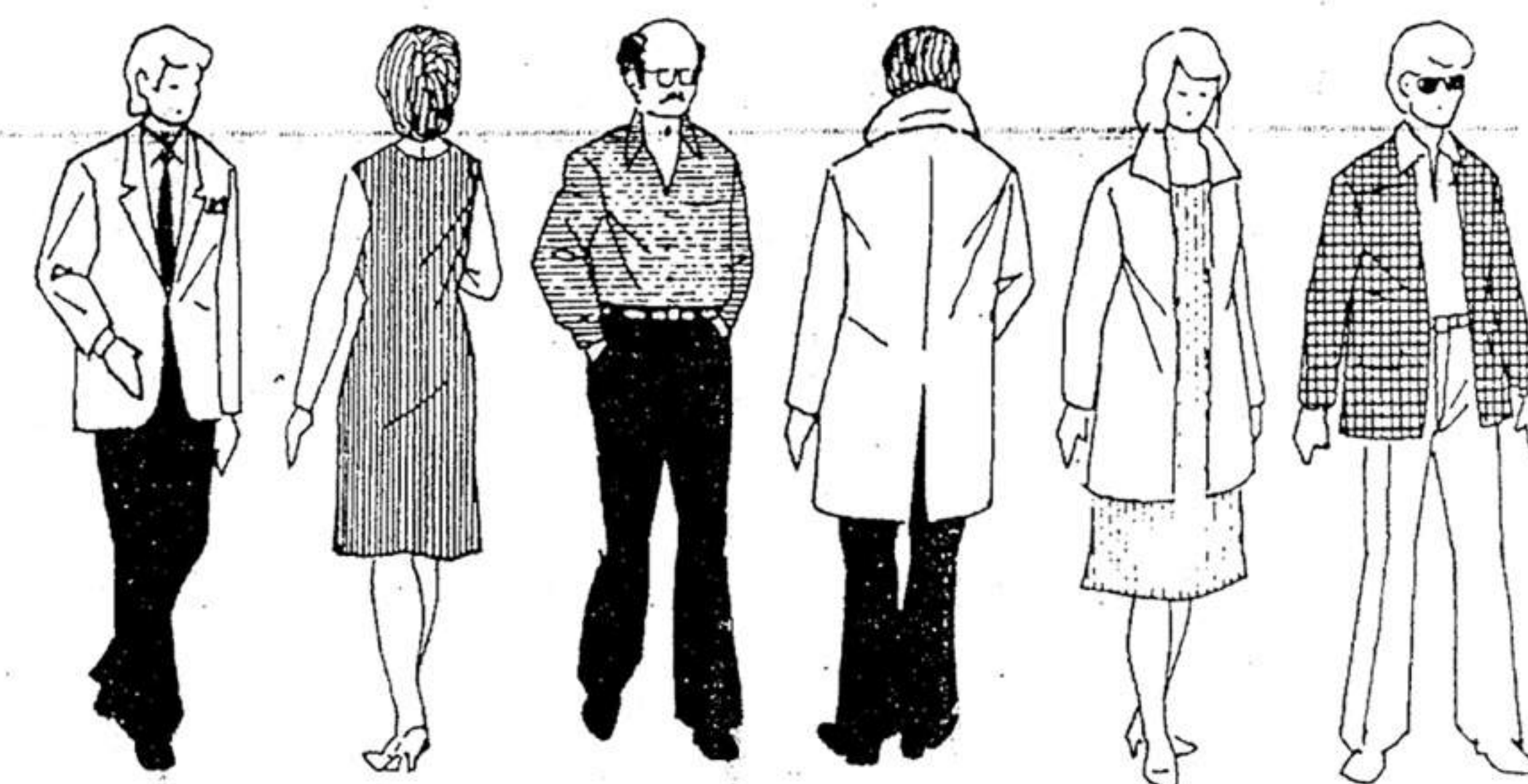
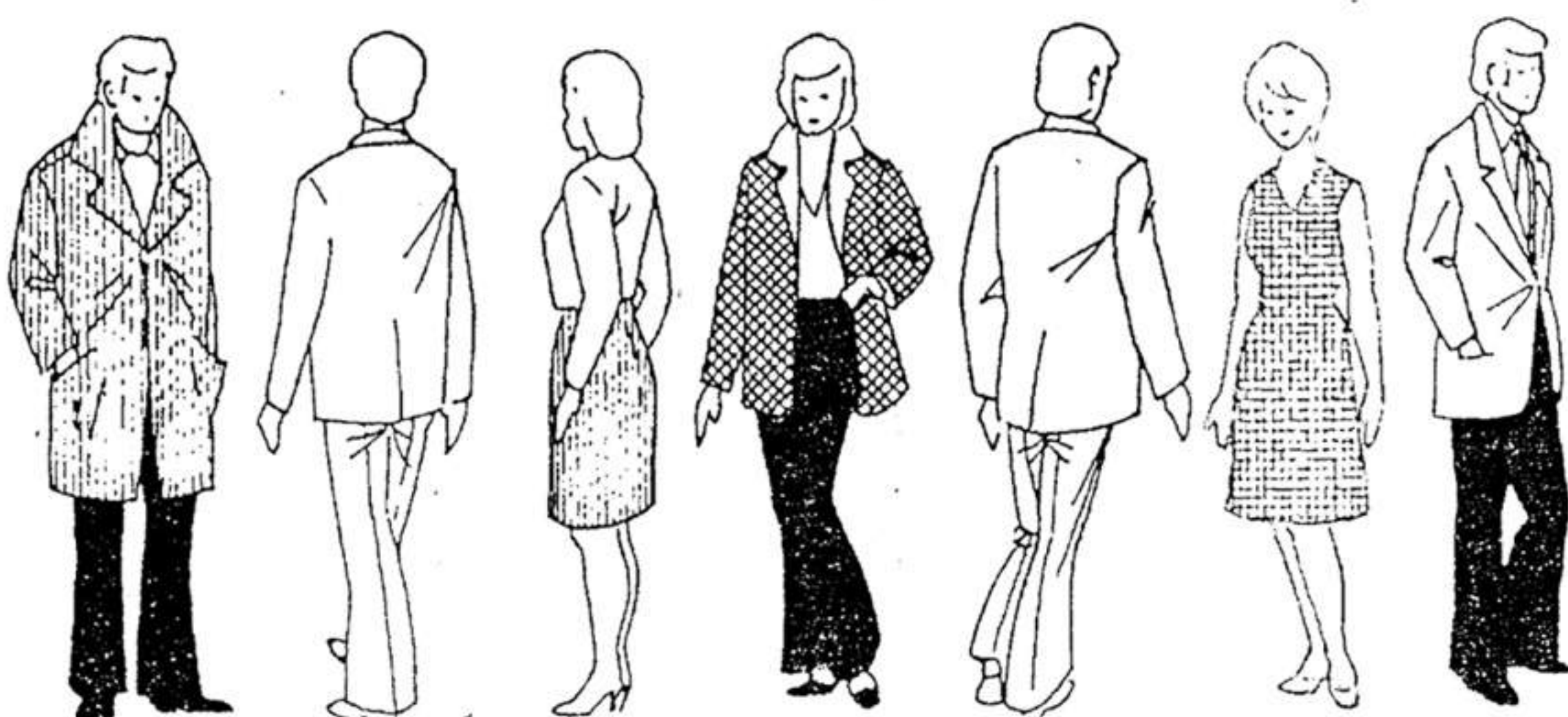
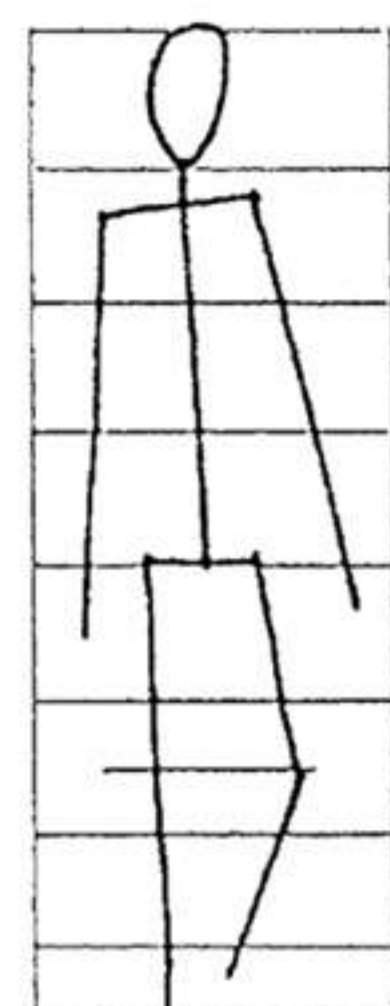
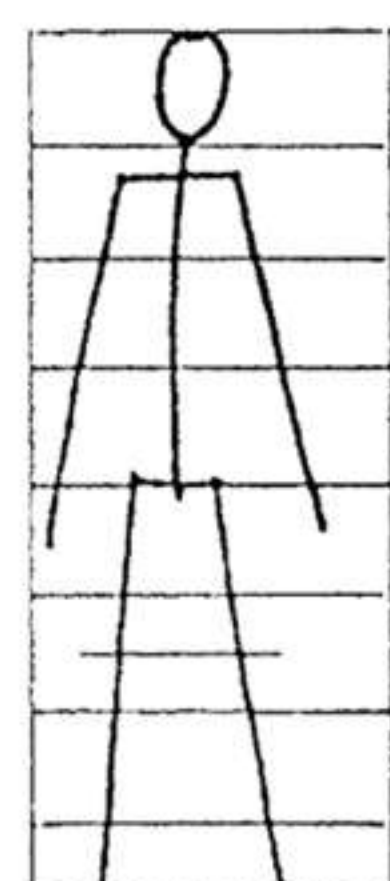
RENDERING EXTERIOR ELEMENTS

HUMAN FIGURES, VEHICLES, TEXTURES



HUMAN FIGURES

HUMAN FIGURES







17.0 Drawing People

We shall confine our comments to the most essential principles.

Travel sketches, artists' and architects' impressions, street and garden scenes are always more expressive when they include human figures.

The specific aim of this section is to prevent otherwise successful geometrical drawings from being ruined by the inclusion of deformed human shapes.

Our eye level determines the actual human dimension for all our activities within the man-made world. Buildings, structures, parks, streets, and landscapes should always be matched to human requirements for attainability, accessibility, suitability, adequacy, etc.

If we assume a certain uniformity in human stature we may conclude that the individual parts of the human body are of uniform dimension also.

Since antiquity it has been customary to divide up the human proportions into eight equal parts, with certain parts of the body located at each subdivision. The length of the head from crown to chin may generally be taken to represent one-eighth. The sketches on this page give a rough indication of the main reference points. The reader is advised to take a sheet of paper and copy the divisions until he has fixed the sectional structure firmly in his mind; this will also help to avoid some typical mistakes. The neck for example must be set in such a way so that the head does not sit directly on the shoulders. In many sketches the head can be simply positioned above the body without any interconnecting lines. A wedge shape can be assumed for human bodies—in rough terms—and this begins at shoulder height from around two-eighths of the overall height, narrowing rapidly toward the ground.

Drawing heads should not cause too many worries once one has studied and memorized certain proportions. The entire head is subdivided from top to bottom in seven sections. In the upper part a circle of $\frac{5}{7}$ is drawn, in the lower part one of $\frac{4}{7}$ diameter. The following proportions are important: the hairline comes at $\frac{1}{7}$ down from the crown, followed by $\frac{2}{7}$ head height as the forehead and temples. Eyebrows and the root of the nose come immediately beneath the forehead. The nose is about $\frac{2}{7}$ head height in length and ends $\frac{2}{7}$ above the chin. The mouth is located slightly above the bottom seventh (see Fig. 17.2).

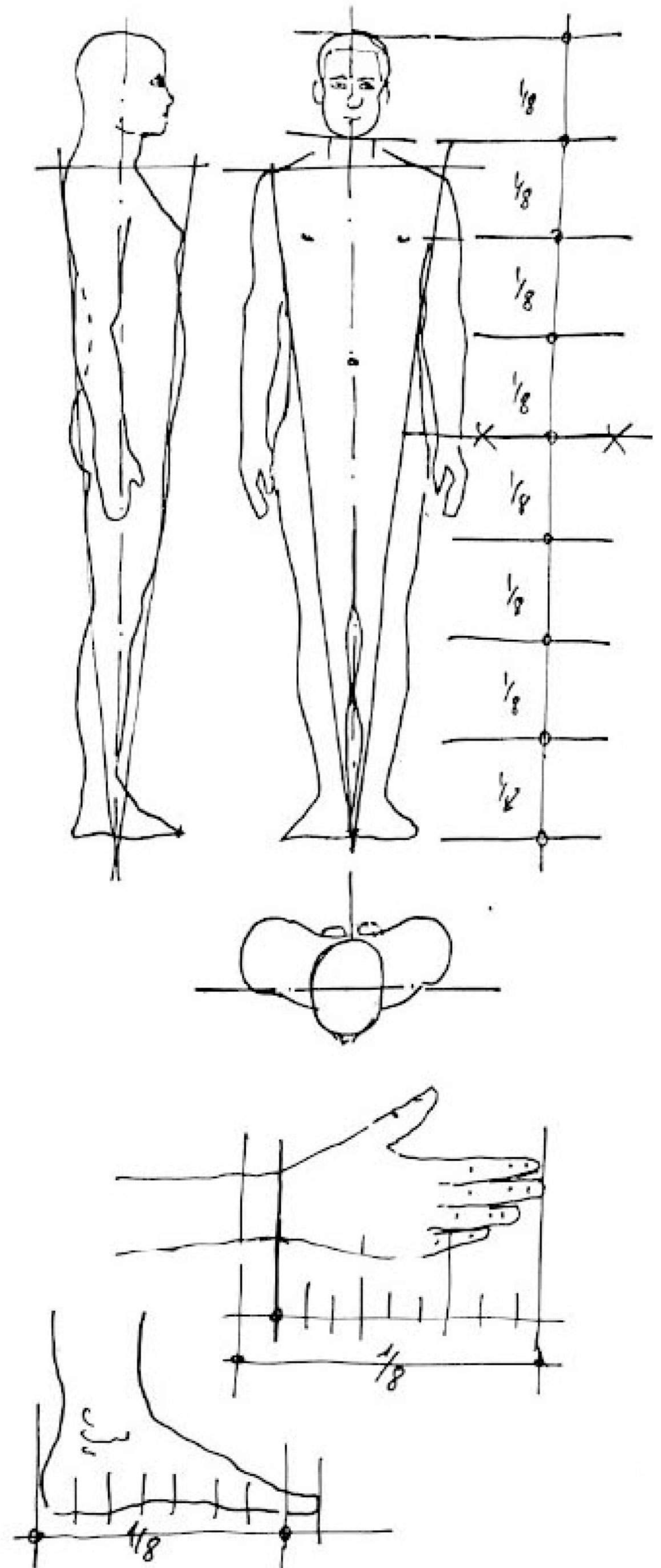
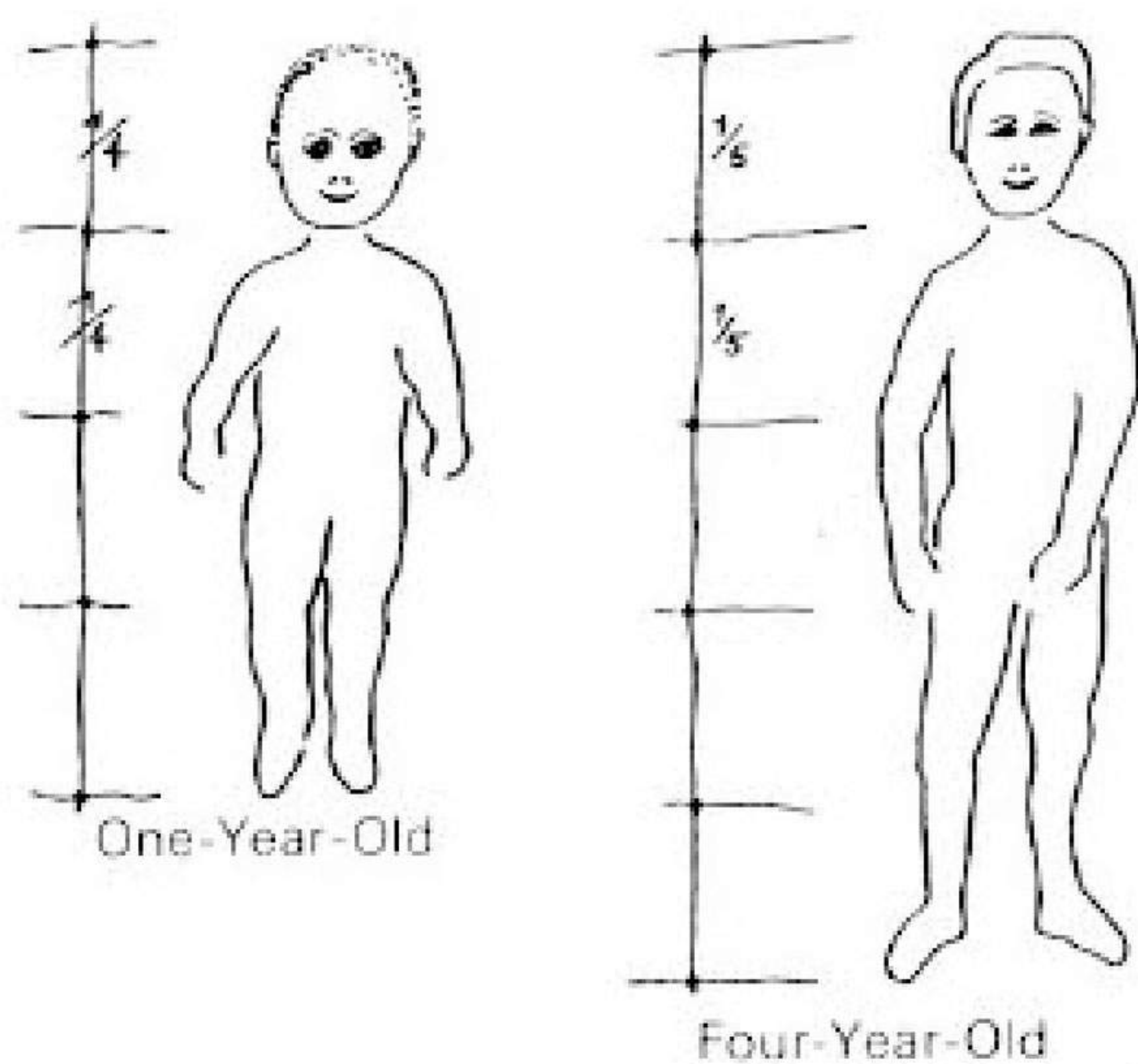


Figure 17.1



Here are some examples of figures shown in outline. This simple method of representing people is most suitable when the chief aim of the drawing is to show objects, in which case the figures should lend the illustration scale (sense of proportion) and a certain degree of expression. Once again the ground rules: as few lines as possible should be drawn; only the typical lines of the figure should be highlighted and stressed; areas need not be filled in; omit unnecessary detail.

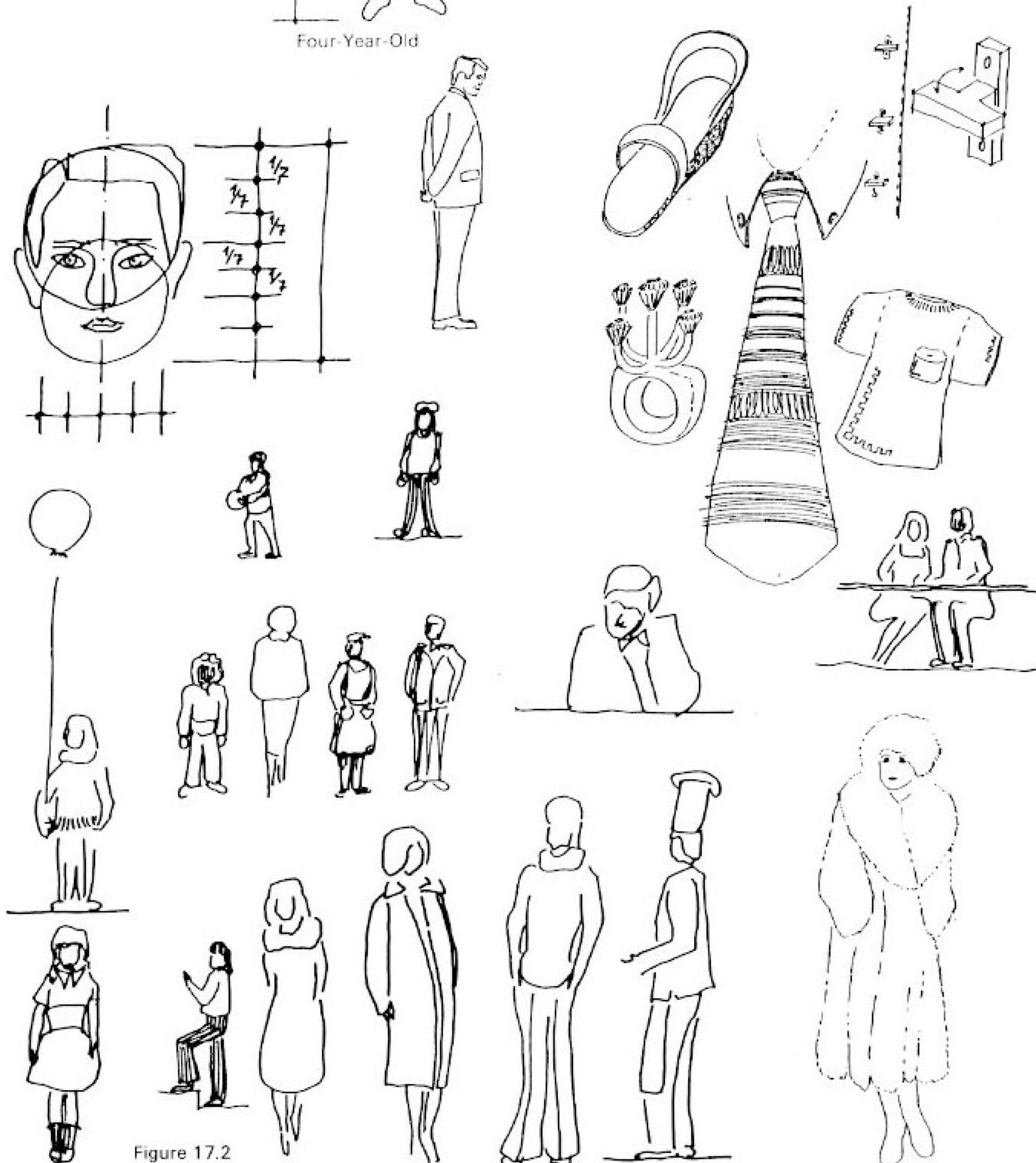
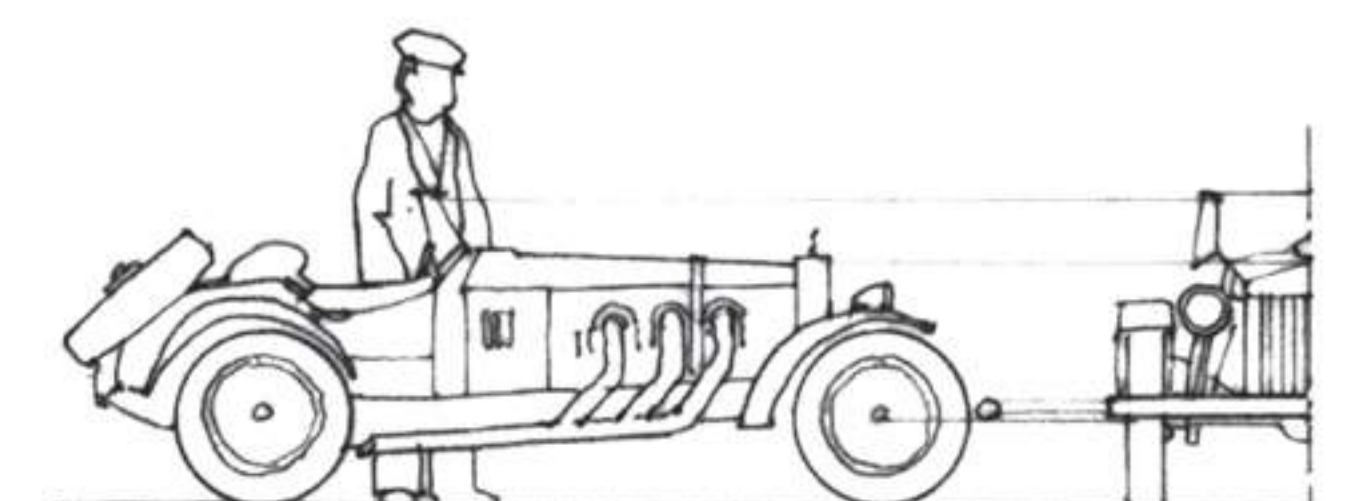
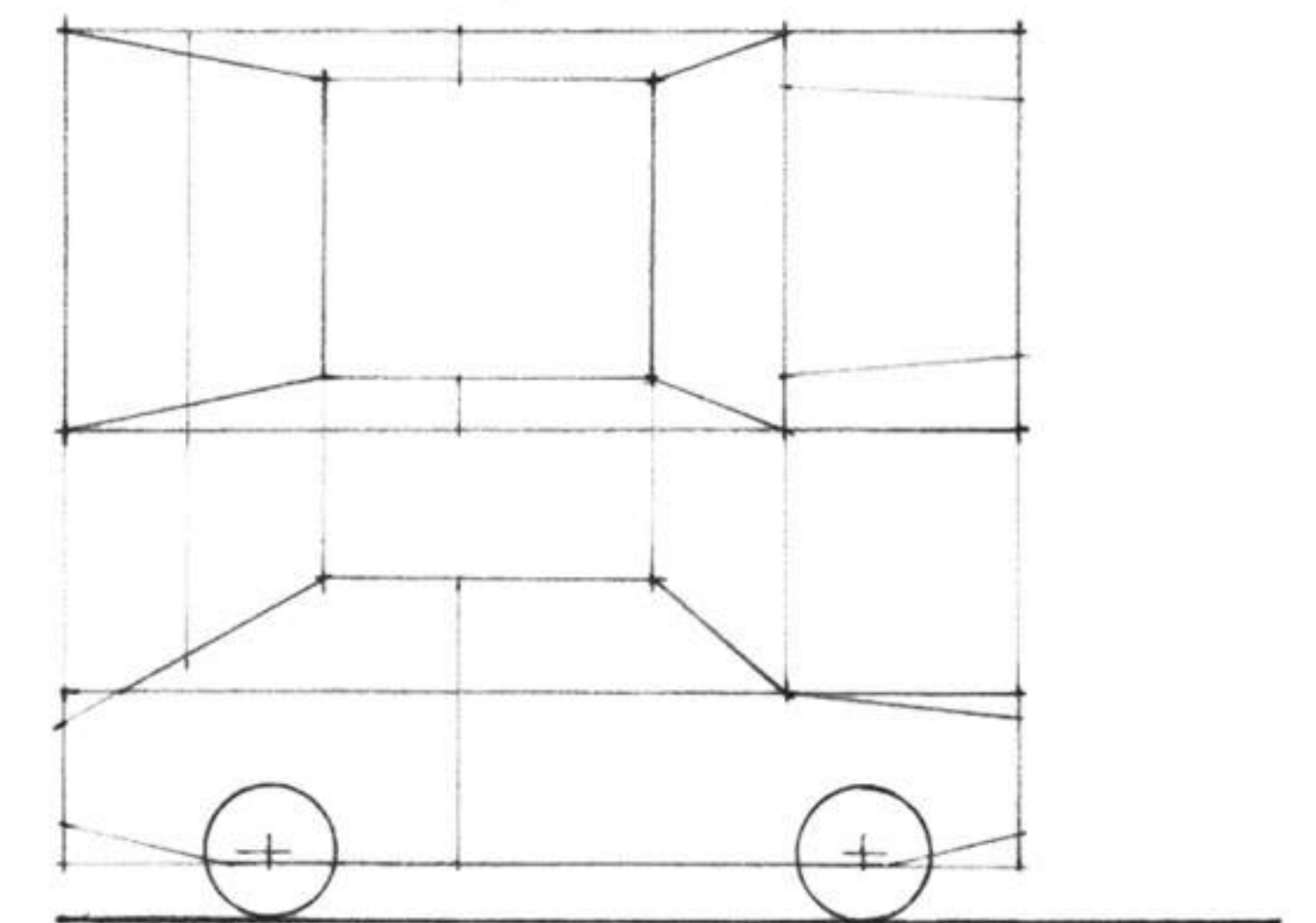
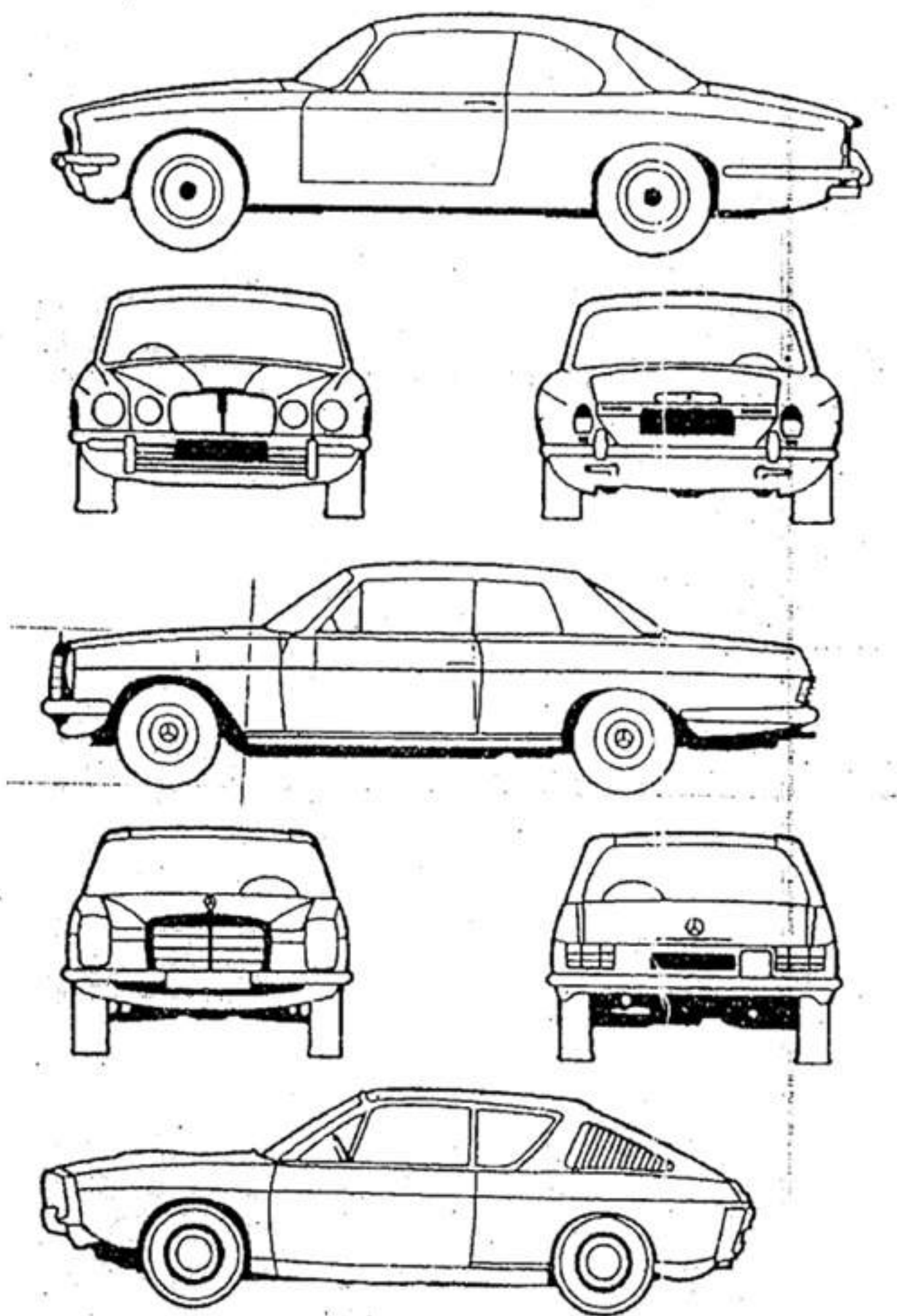
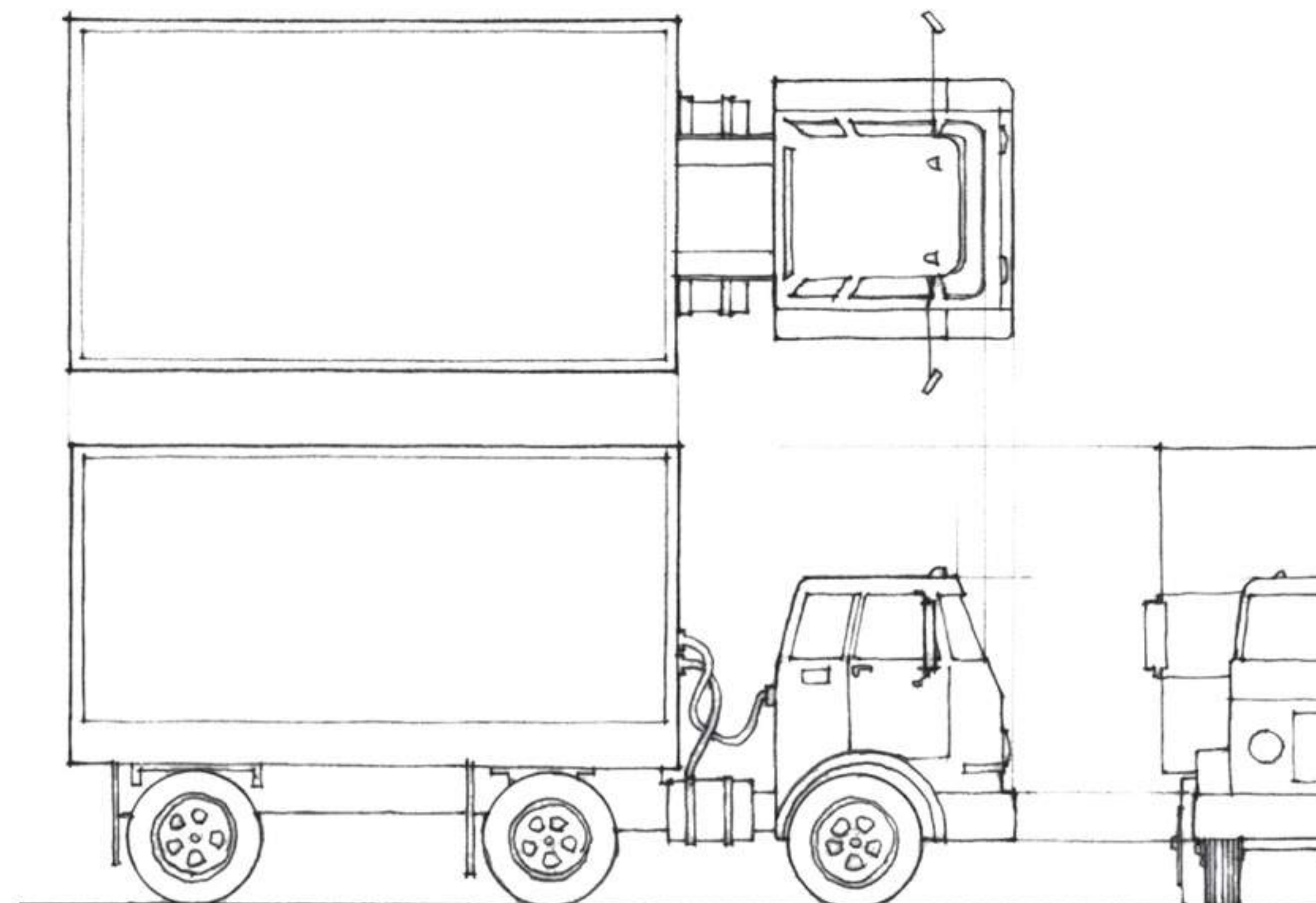
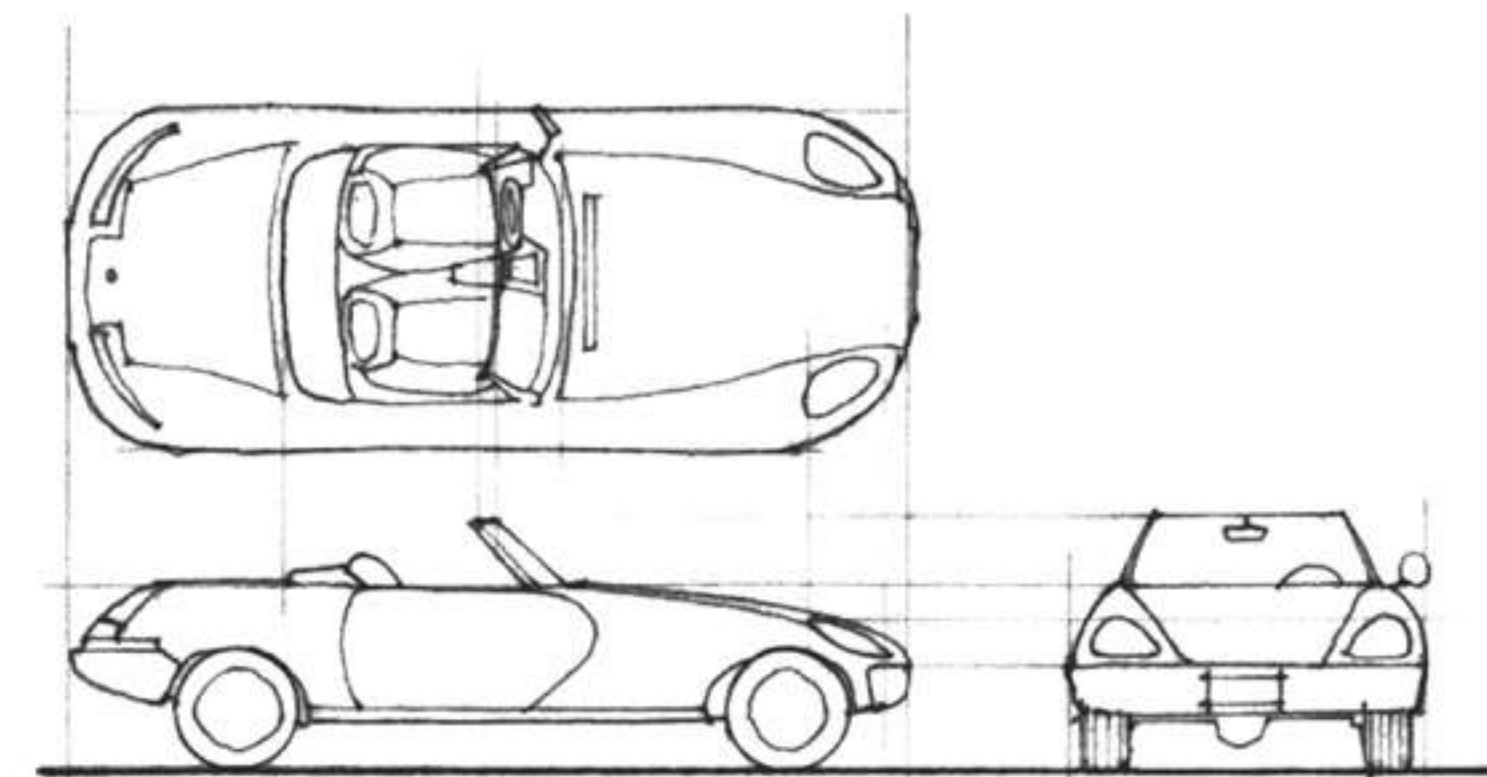
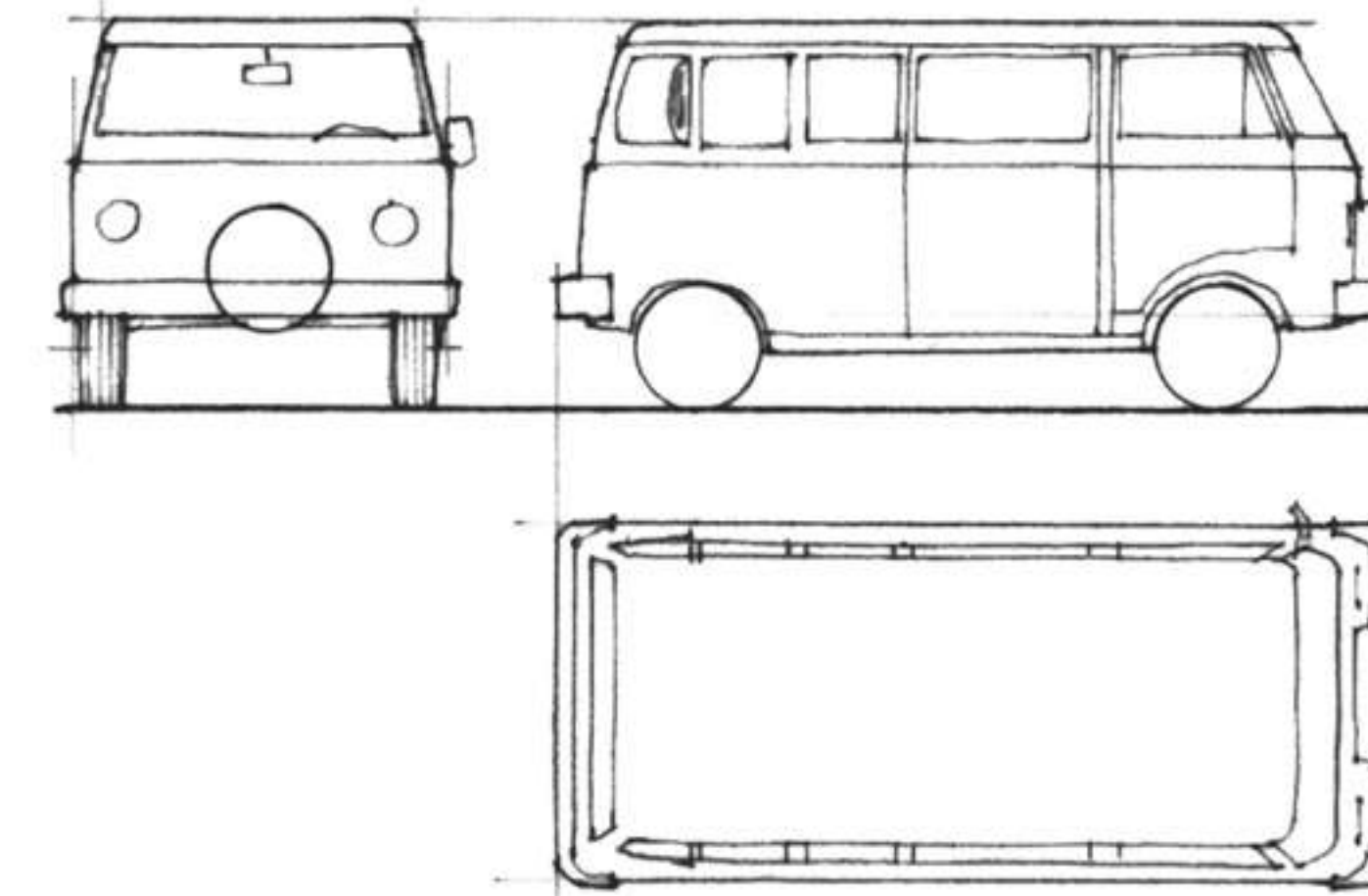
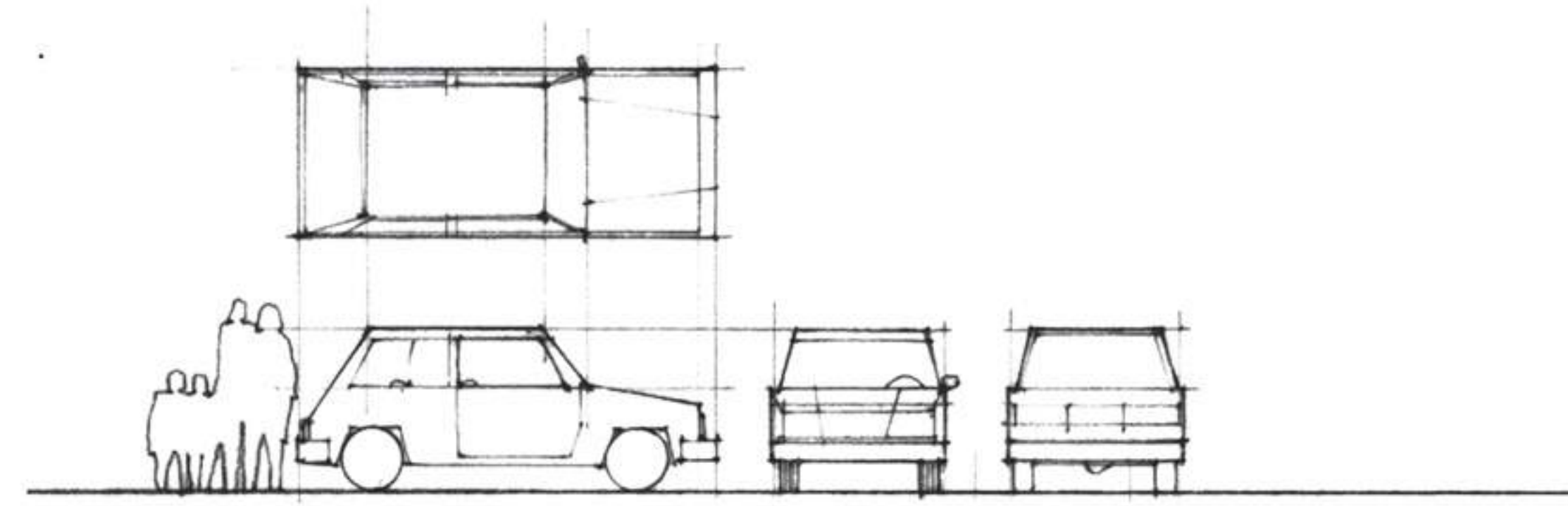
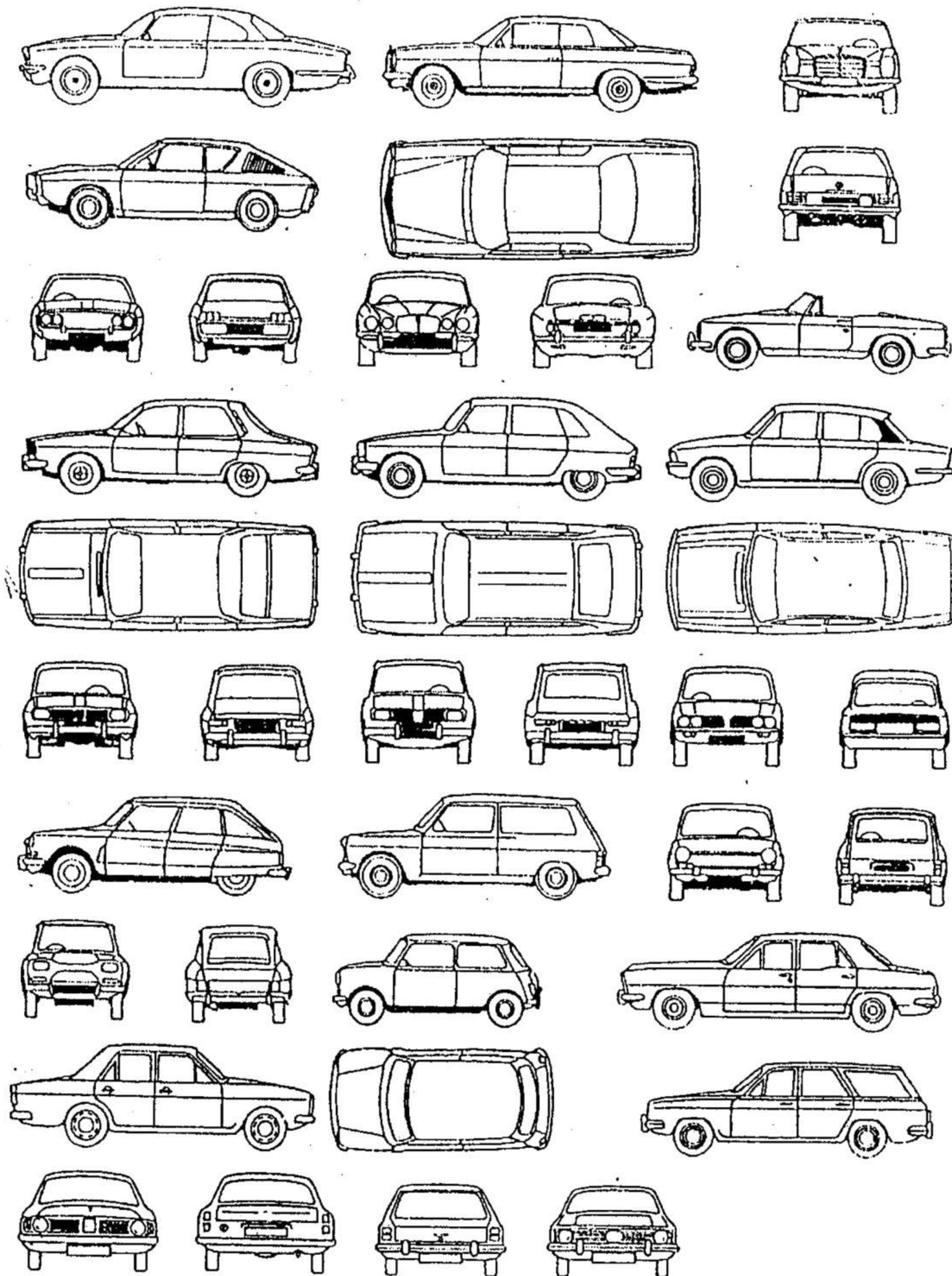


Figure 17.2

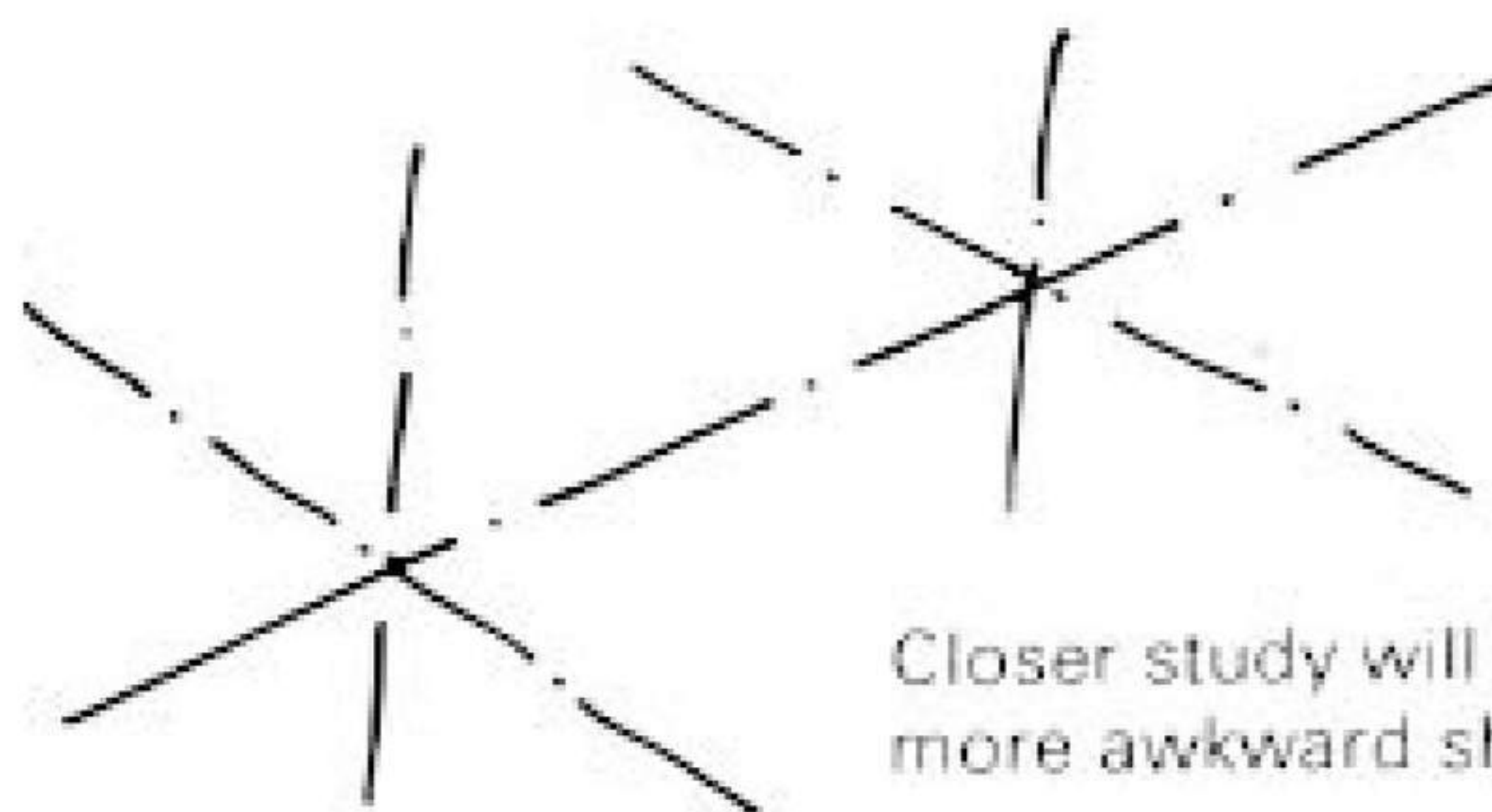
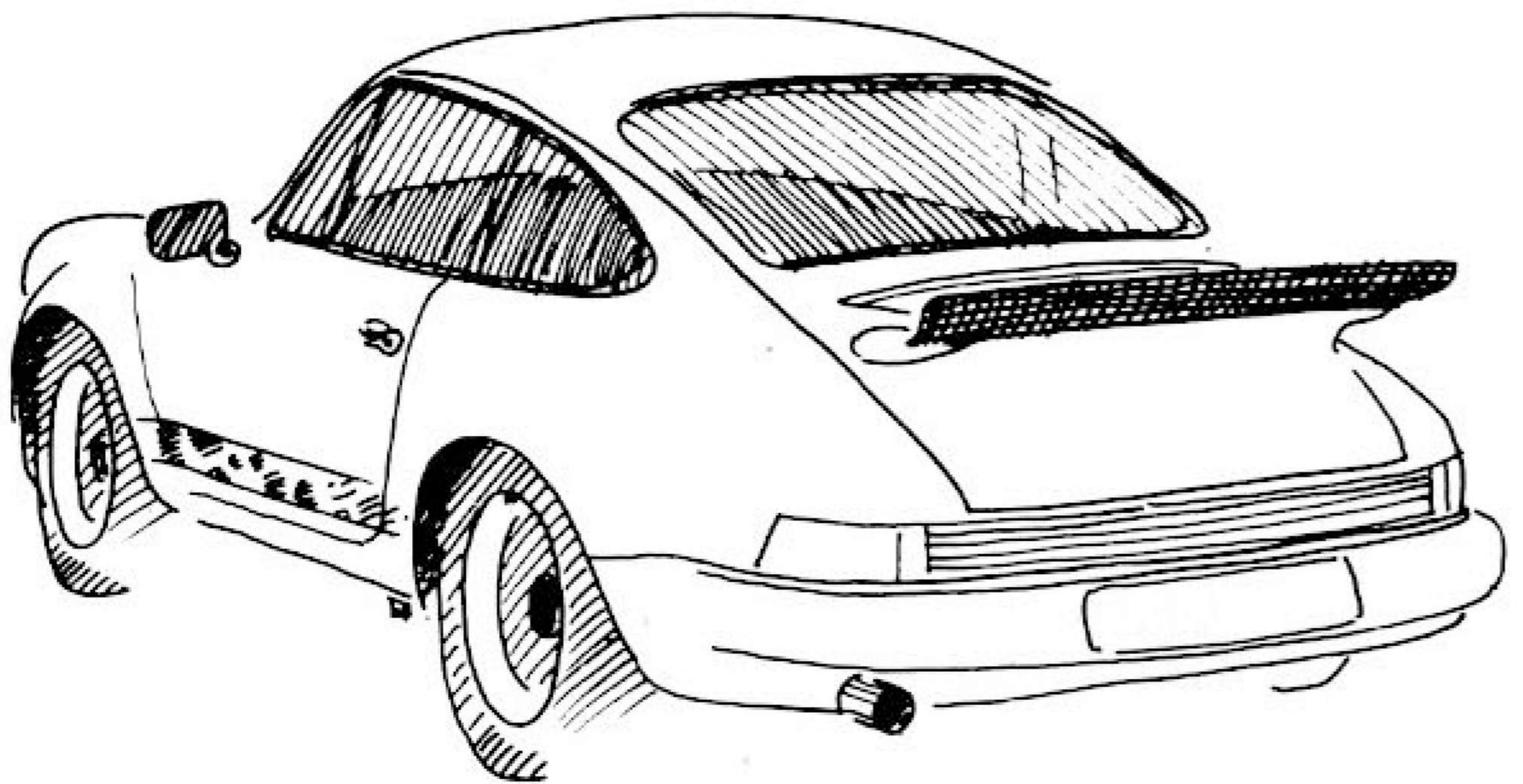
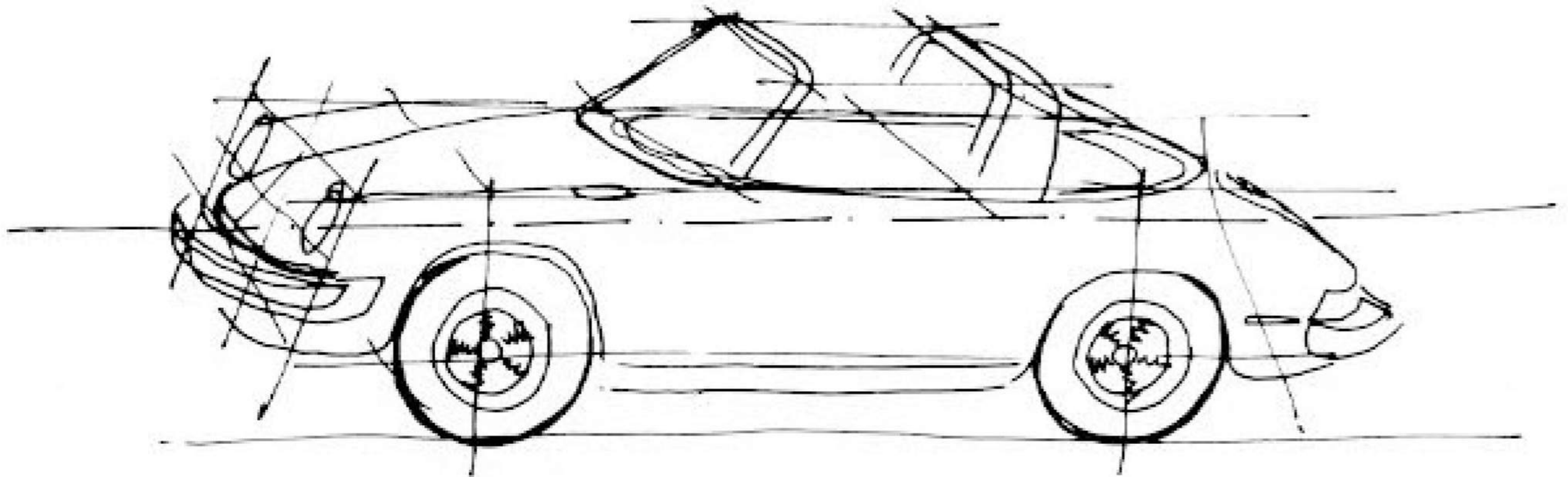
VEHICLES



16.0 Drawing Other Forms of Transport

The better one is able to grasp all contours, especially the vanishing lines, before setting pencil to paper, the better one's drawings of land vehicles, aircraft, and marine vessels will be. Free curves which do not lie in planes that are perpendicular

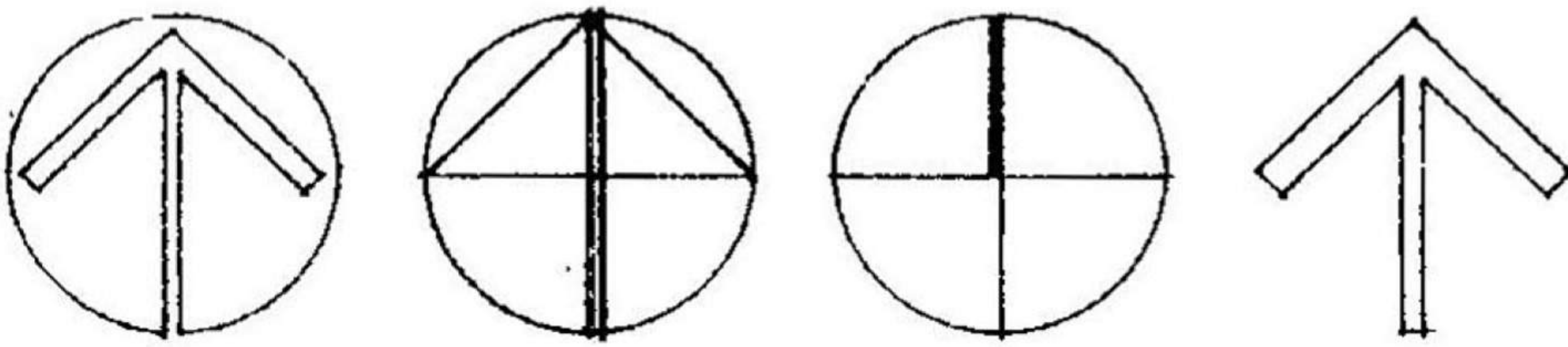
to each other can pose problems, and so it is frequently advisable mentally to insert reference shapes (sphere, cone, cylinder, annular ring, etc.) into the volume and then determine the boundary lines accordingly.



Closer study will always reveal reference axes for the more awkward shapes.

GRAPHIC SYMBOLS

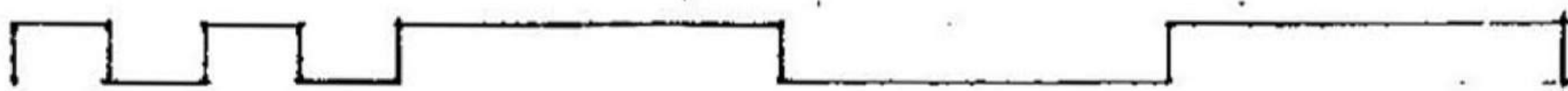
Graphic symbols help the viewer identify the various aspects and features of a drawing or presentation.



- North arrows indicate the major compass points on architectural plans so that the viewer is able to grasp the orientation of a building and its site.



- Graphic scales are graduated lines or bars representing proportionate size. These scales are especially useful because they remain proportional when a drawing is enlarged or reduced.



- Section arrows indicate the location of section cuts on plan drawings.



Graphic symbols rely on conventions to convey information. To be easily recognizable and readable, keep them simple and clean—free of extraneous detail and stylistic flourishes. In enhancing the clarity and readability of a presentation, these devices also become important elements in the overall composition of a drawing or presentation. The impact of graphic symbols and lettering depends on their size, visual weight, and placement.

Size

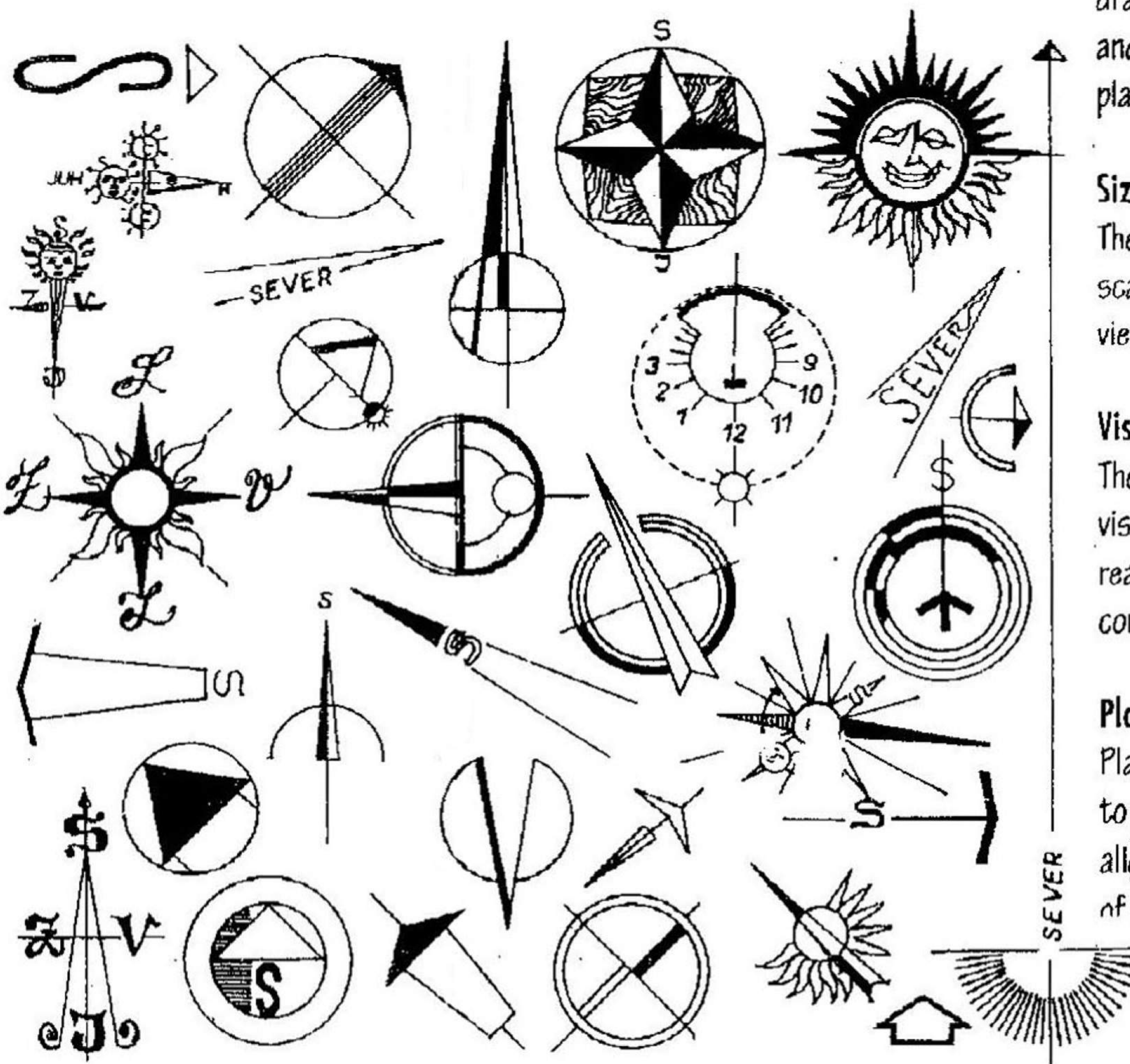
The size of a graphic symbol should be in proportion to the scale of the drawing and readable from the anticipated viewing distance.

Visual Weight

The size and tonal value of a graphic symbol determines its visual weight. If a large symbol or typeface is required for readability but a low value is mandatory for a balanced composition, then use an outline symbol or letter style.

Placement

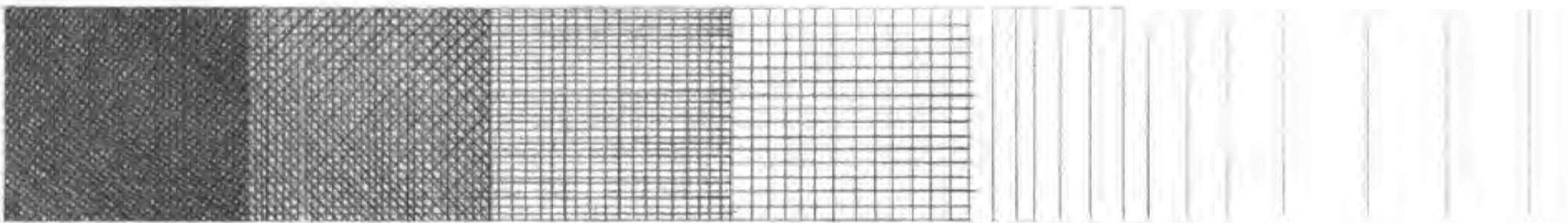
Place graphic symbols as close as possible to the drawing to which they refer. Whenever possible, use spacing and alignment instead of boxes or frames to form visual sets of information.



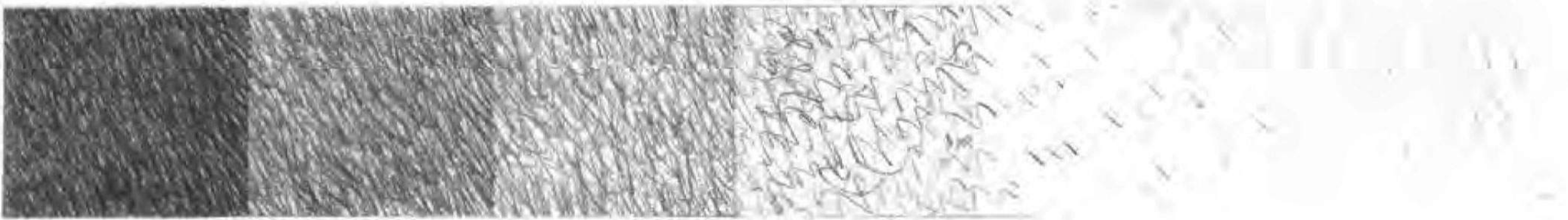
White represents the lightest possible value and black the darkest. In between exists an intermediate range of grays. A familiar form of this range is represented by a gray or value scale having ten equal gradations from white to black. It is worthwhile to practice producing both a stepped series and a graduated scale of tonal values using a variety of media and techniques.



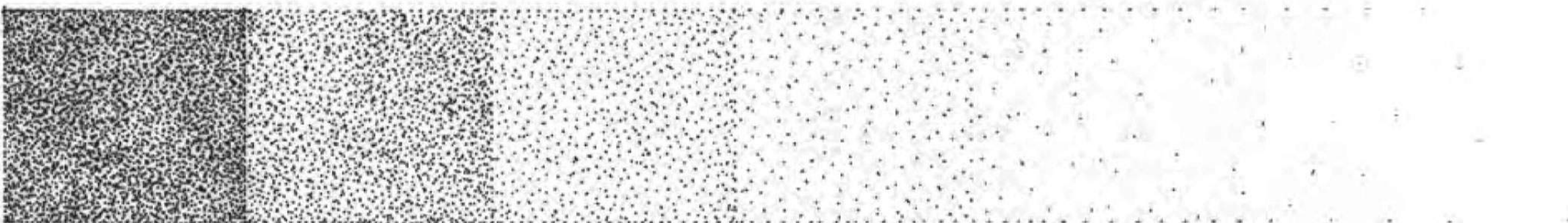
Hatching



Cross-hatching



Scribble

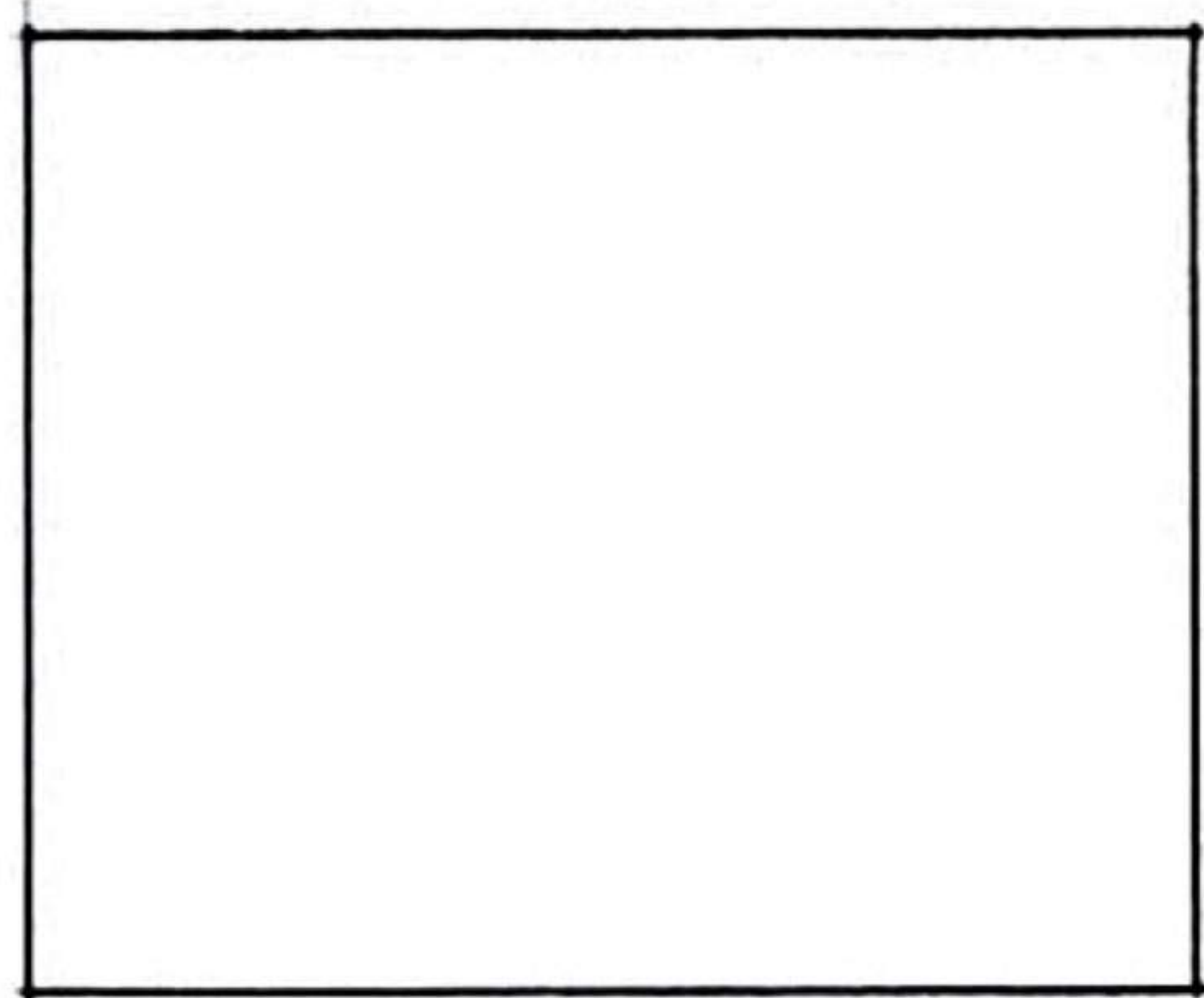


Stippling

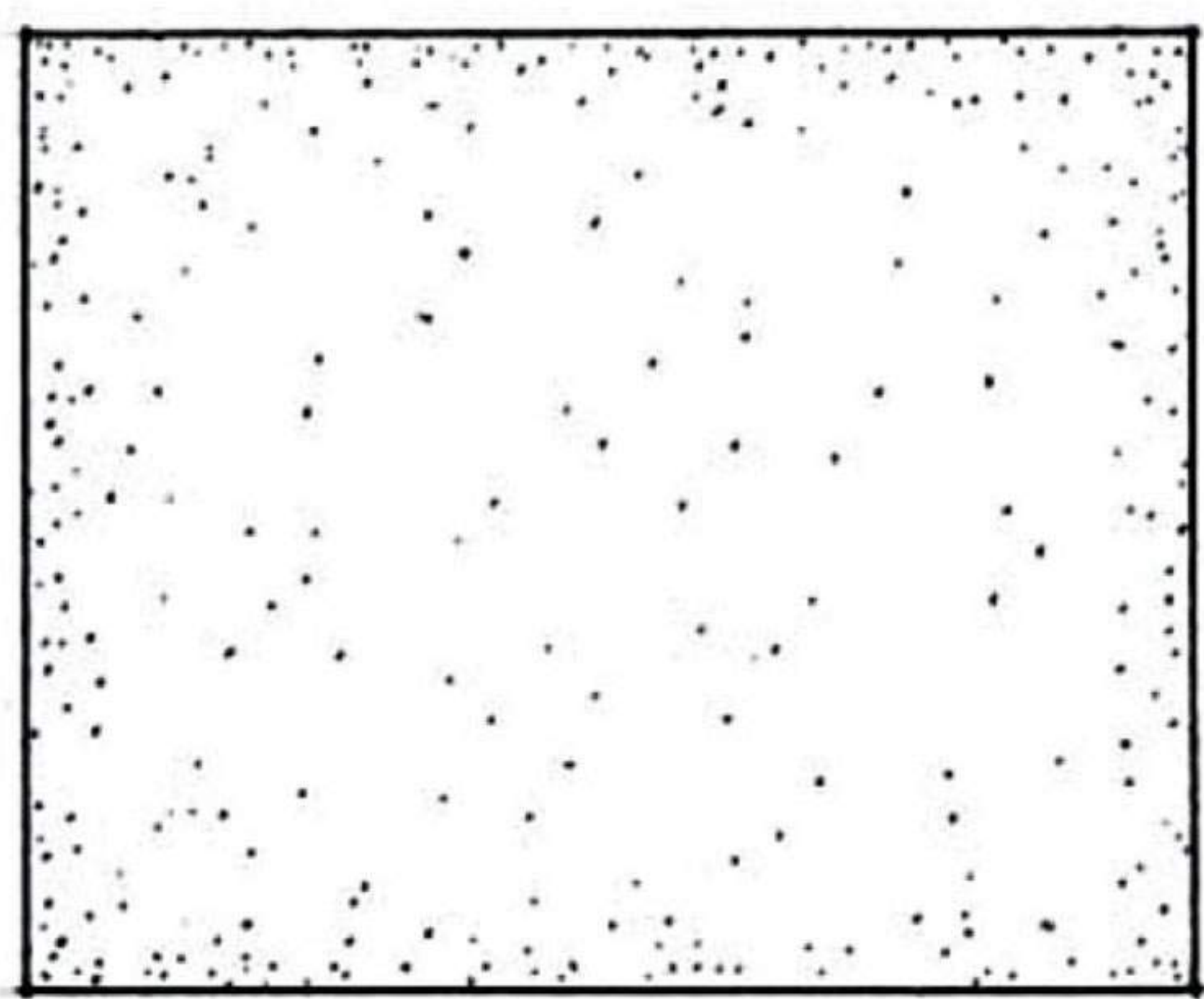
- Note that a series of dots rather than a line defines the edge of the field.
- It is also possible to execute a gray scale on a tinted or colored surface, using a black pencil to define values darker than the tone of the surface and a white pencil to establish the lighter values.

BUILDING ELEVATIONS

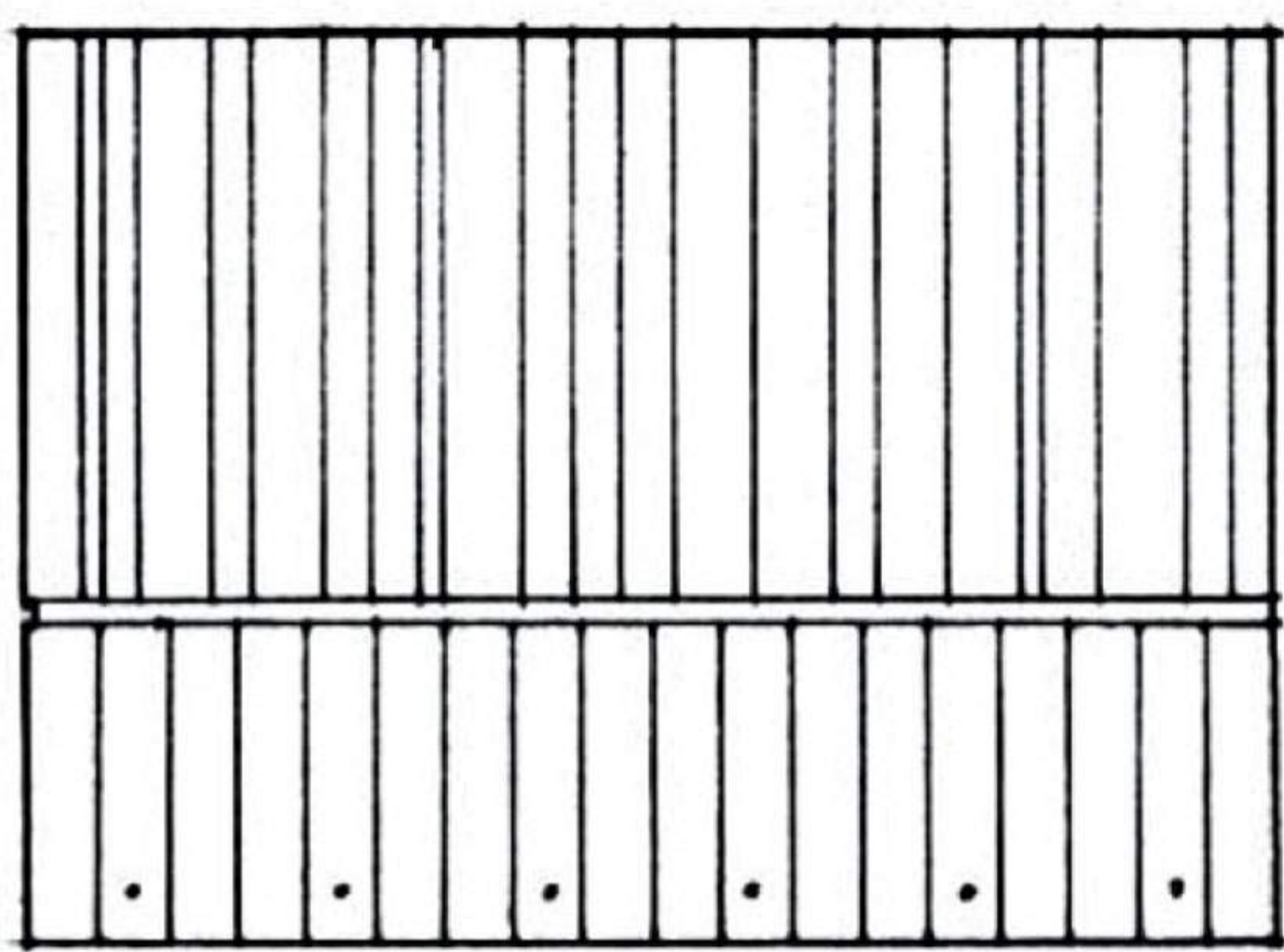
Representing Materials



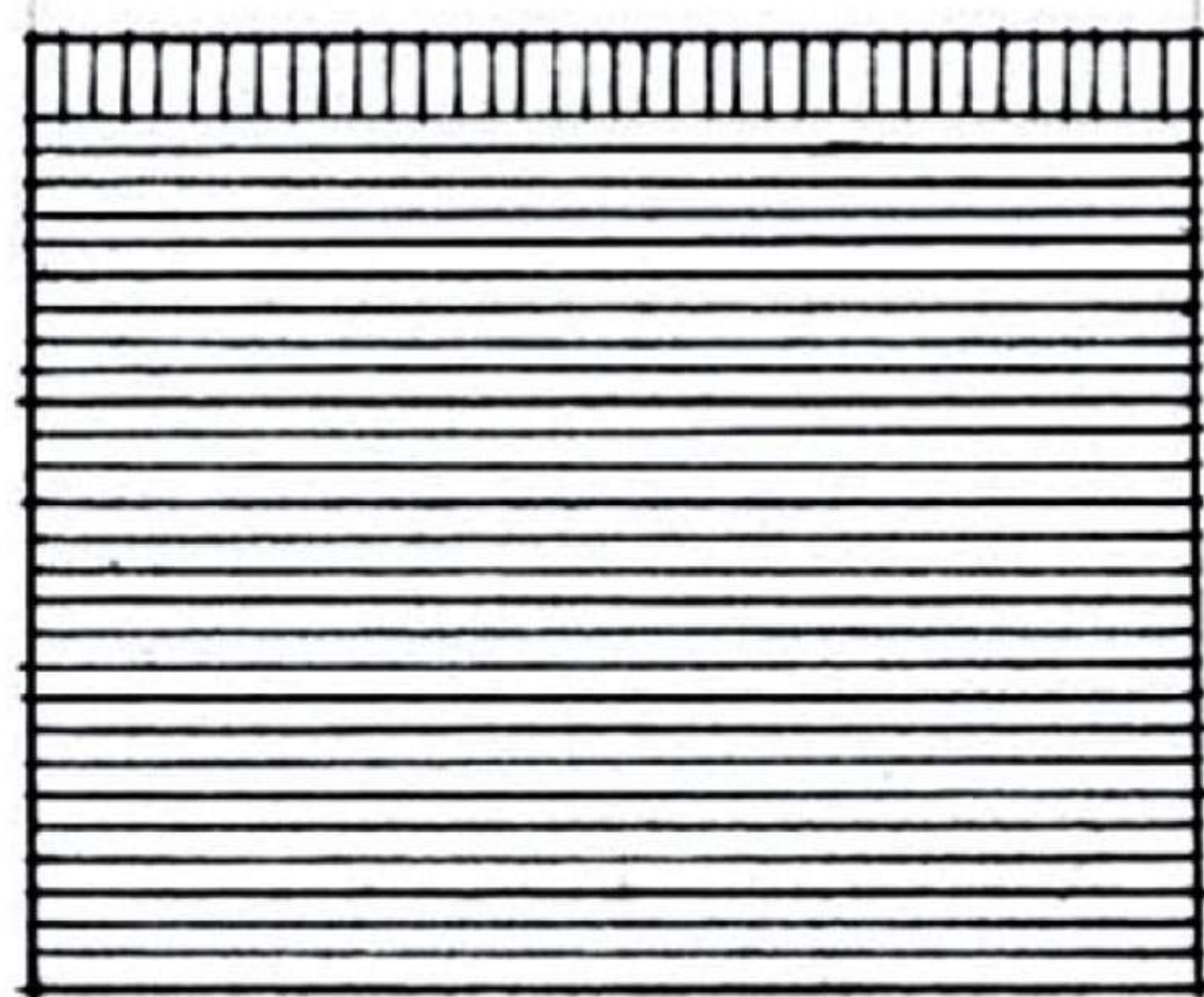
Concrete or Plaster



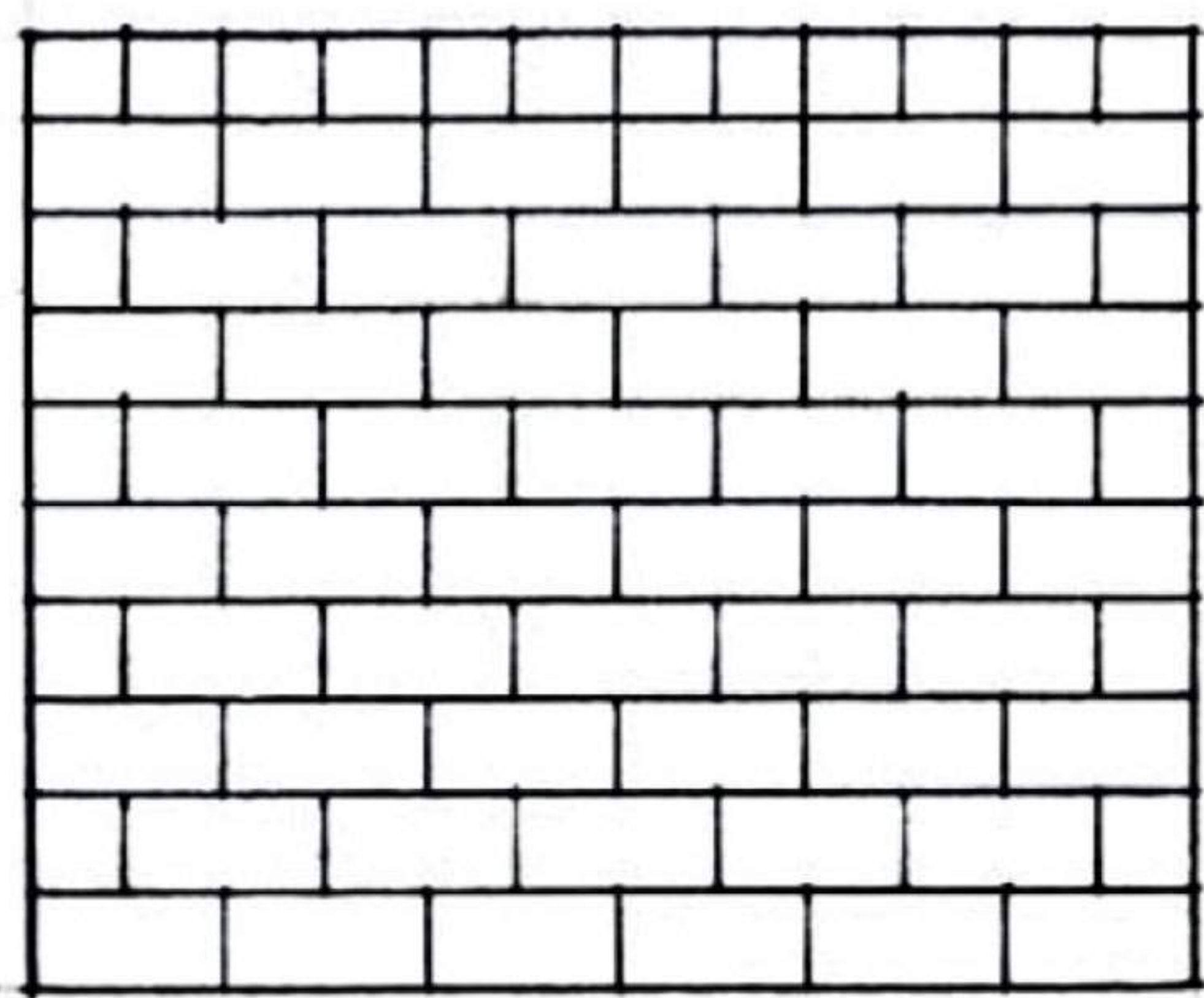
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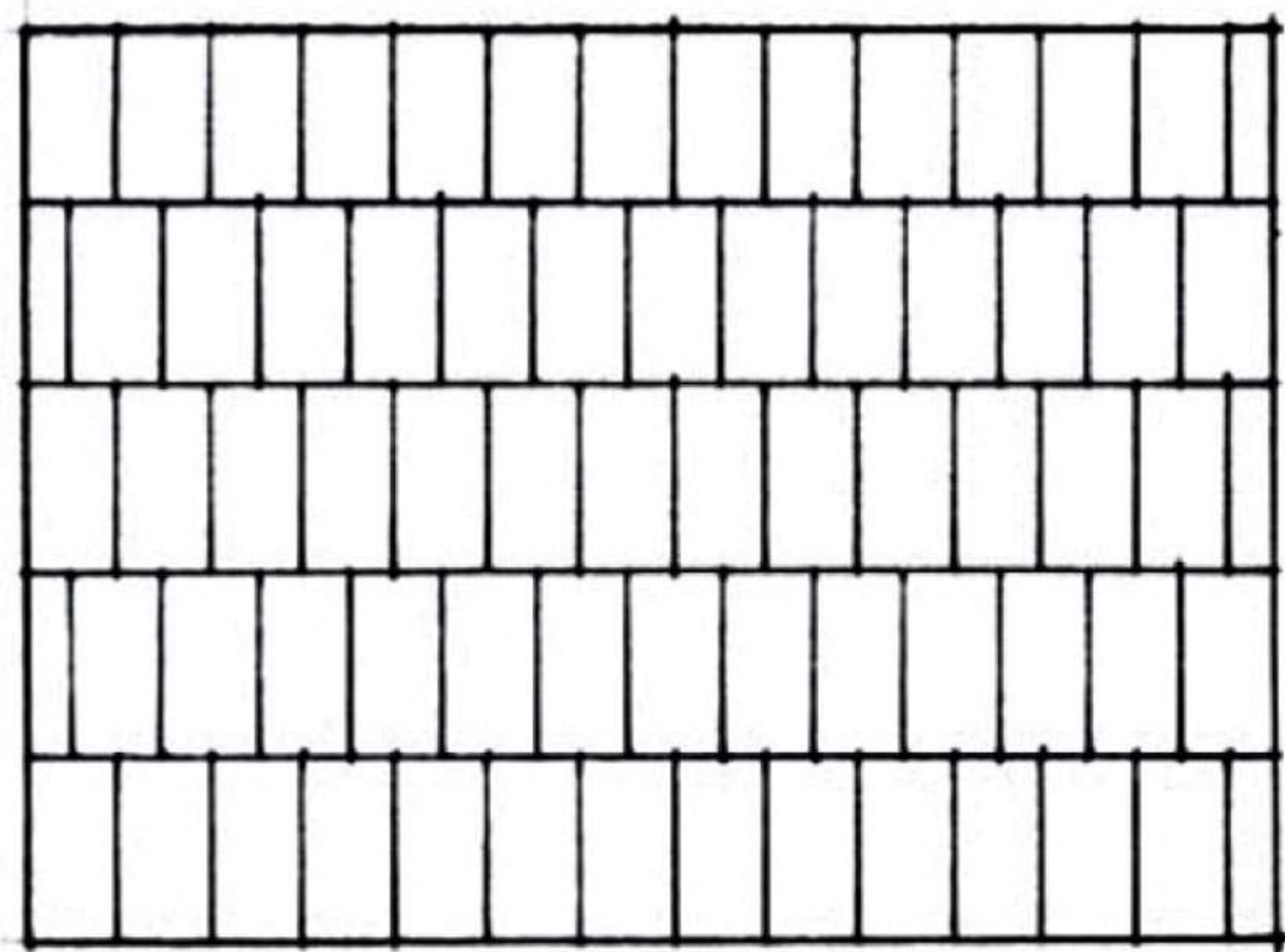
Board-Formed Concrete



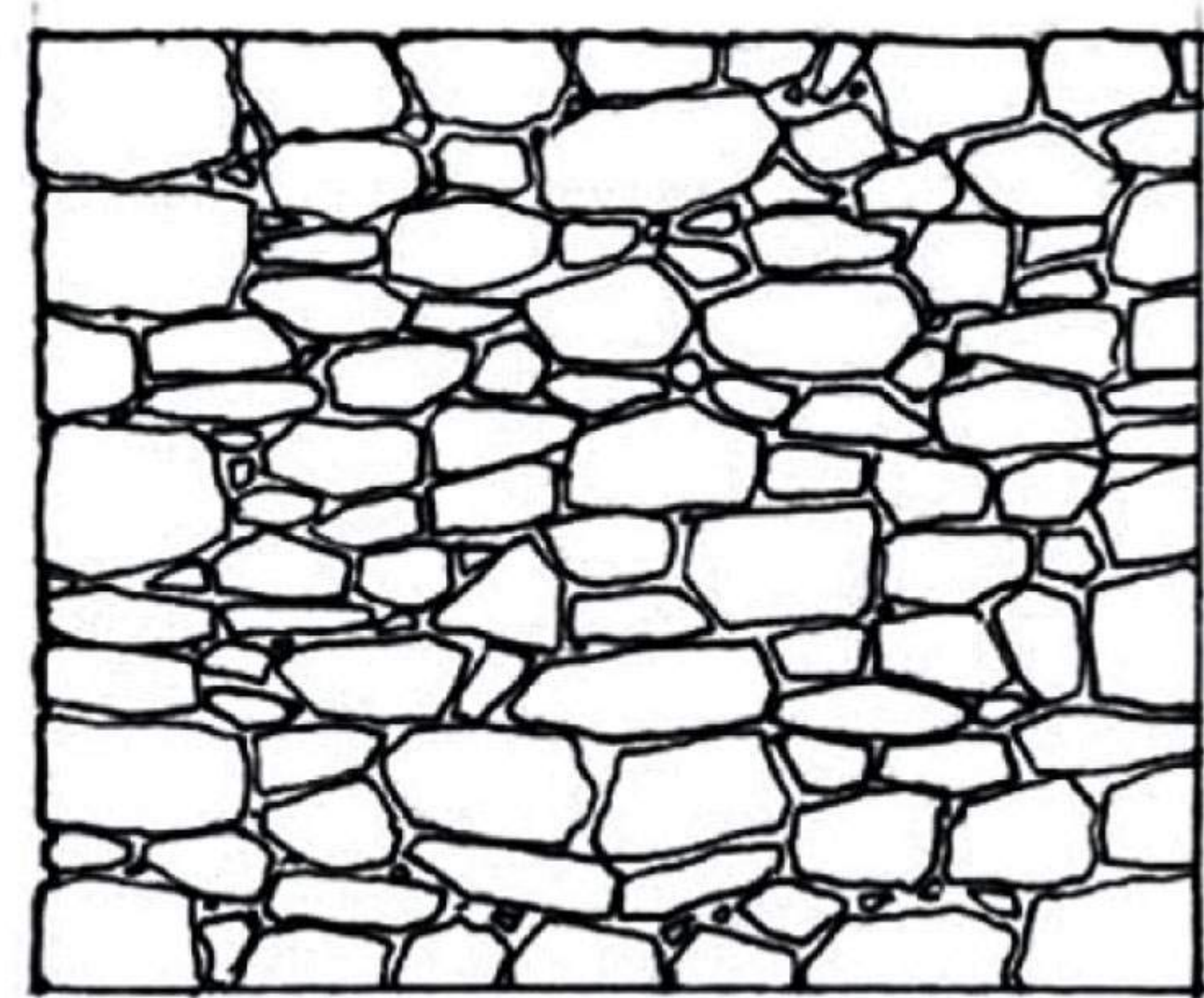
Brick Masonry



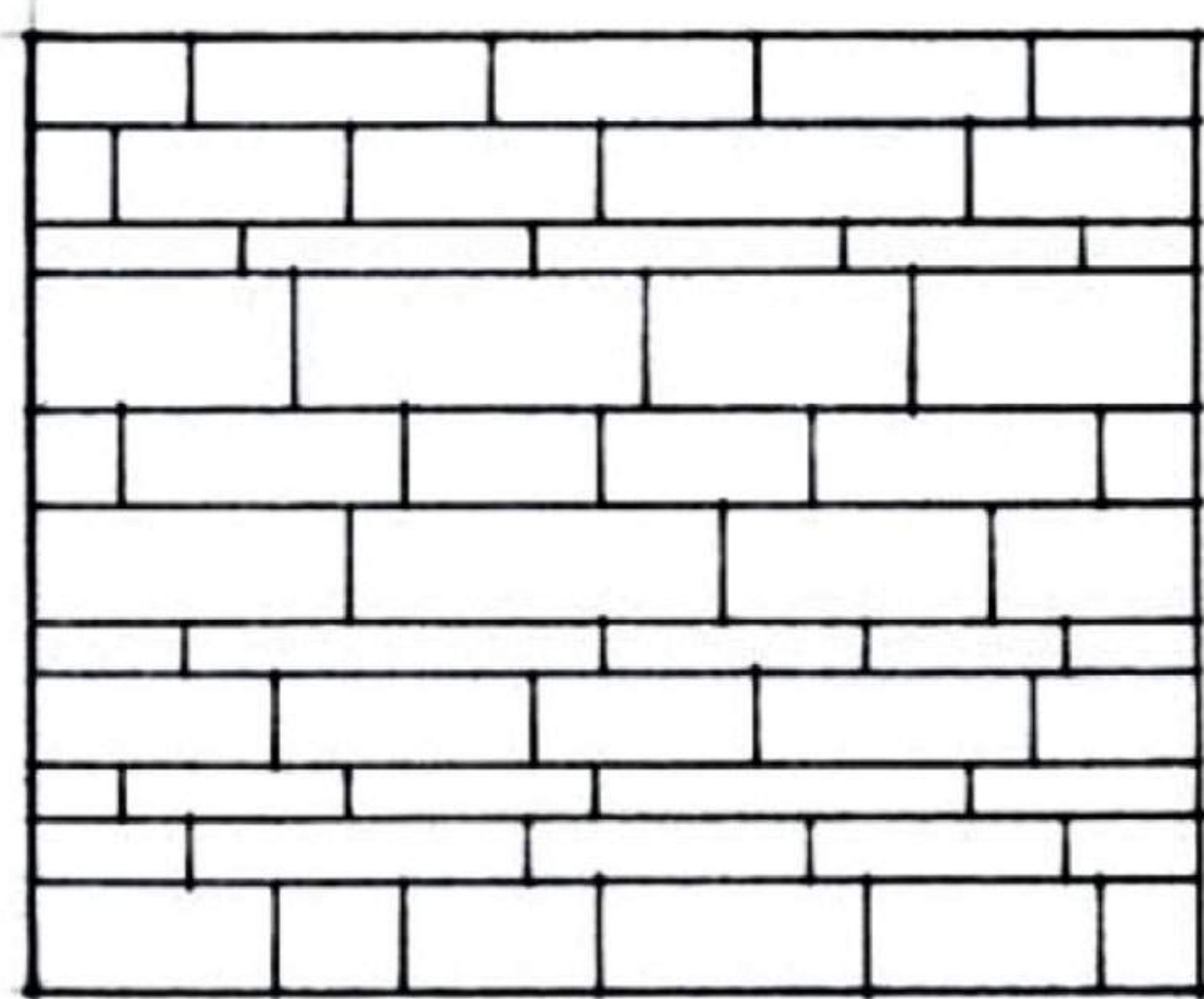
Concrete Masonry



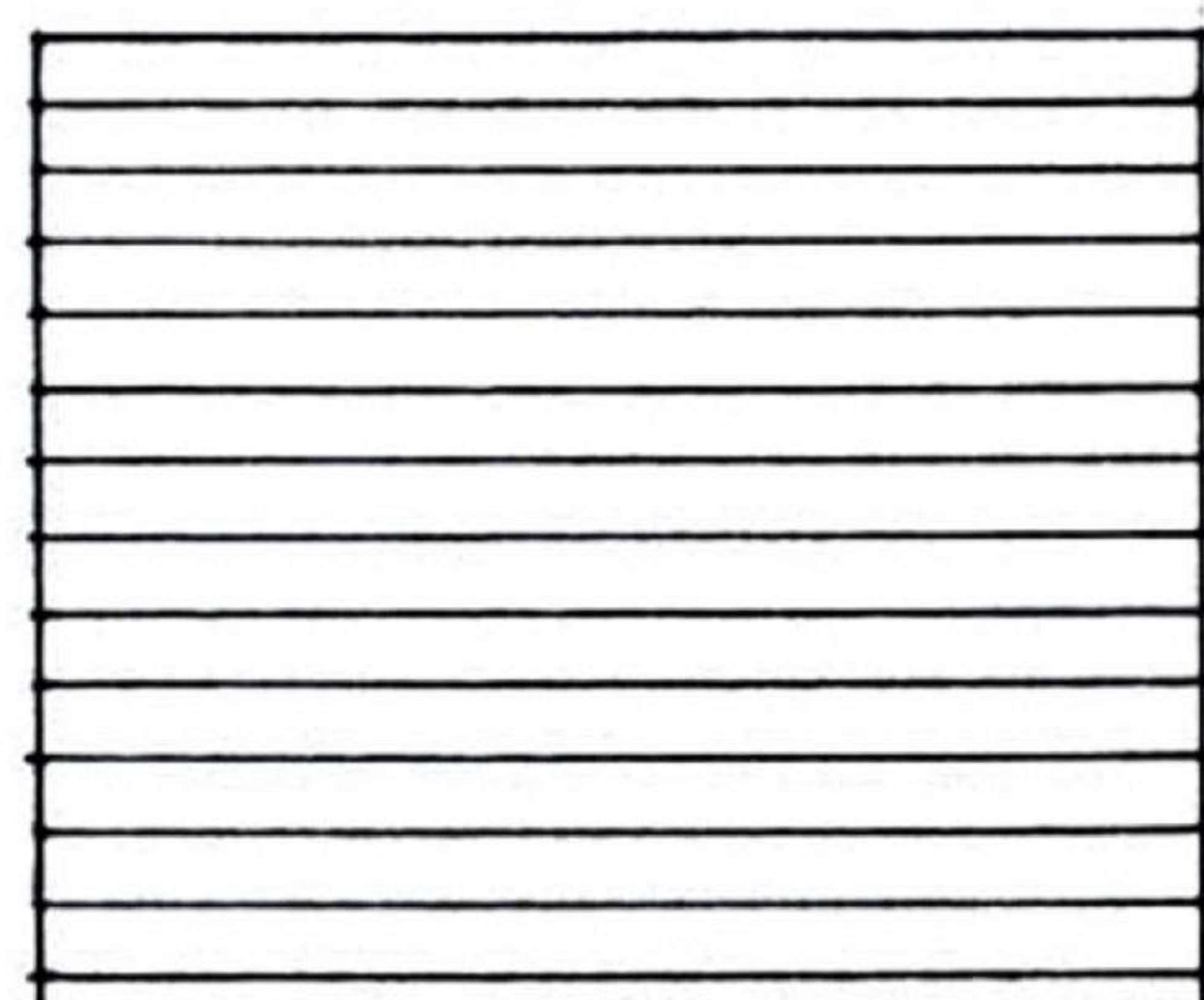
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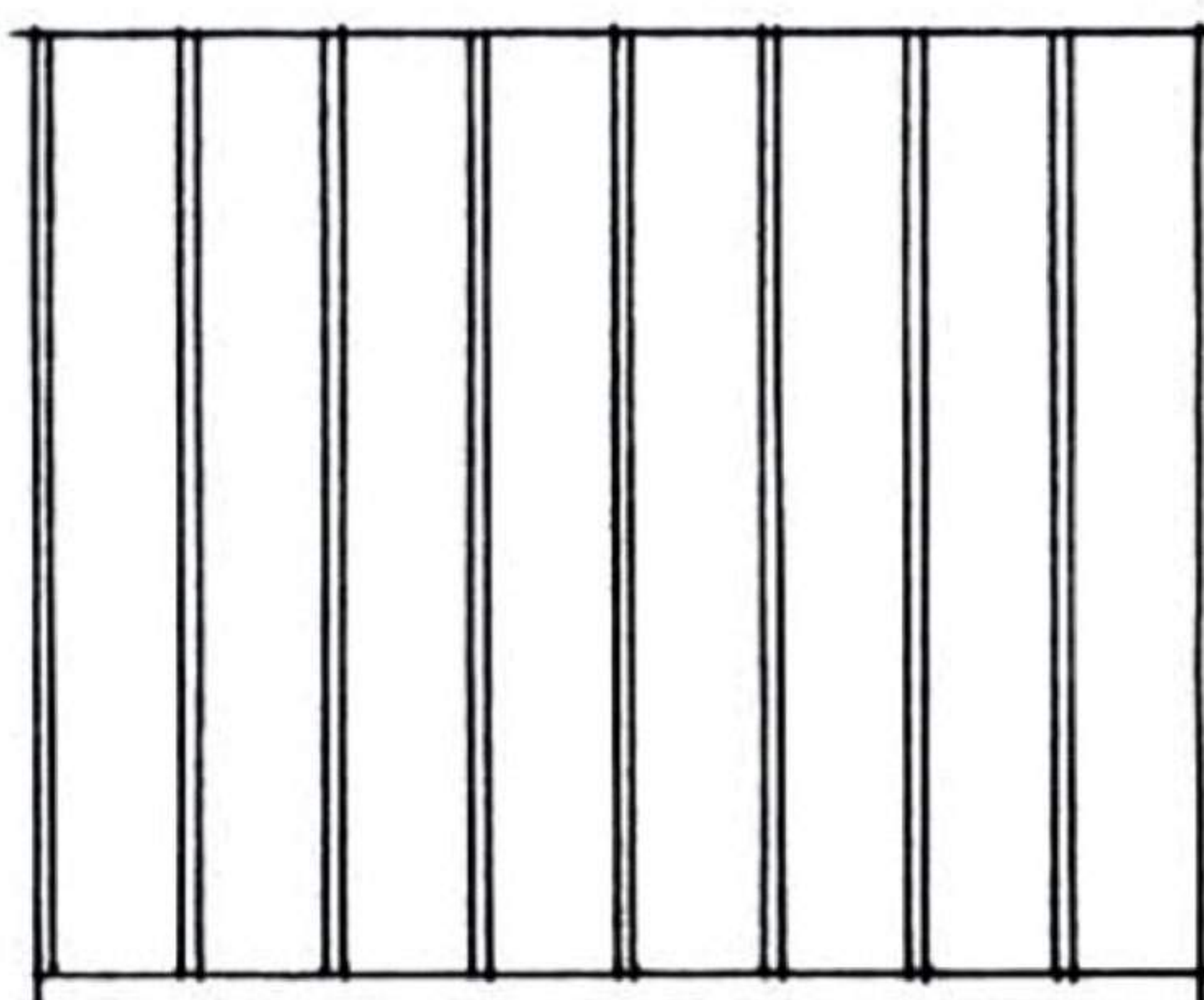
Stone Masonry



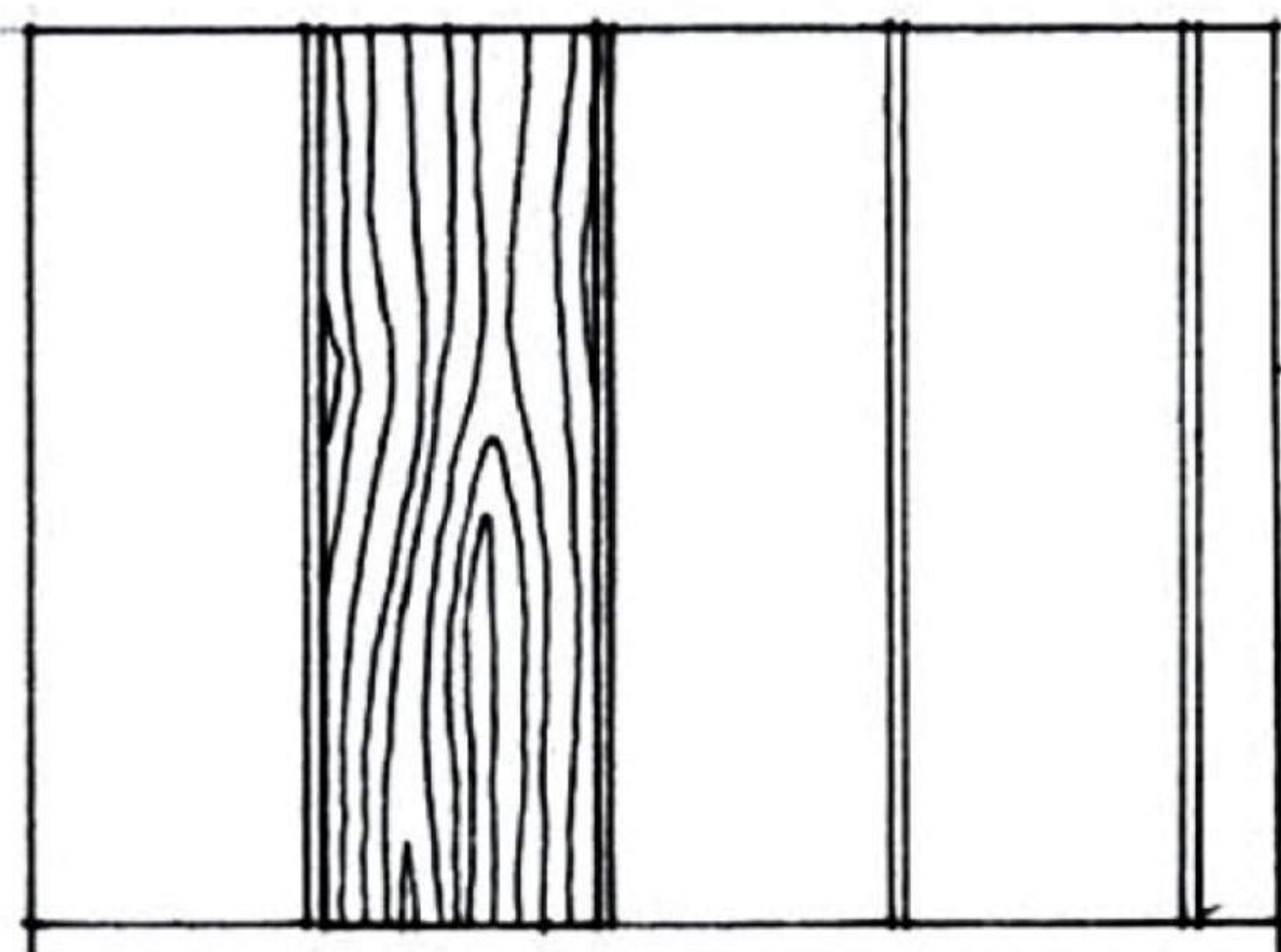
Stone Masonry



Wood Siding

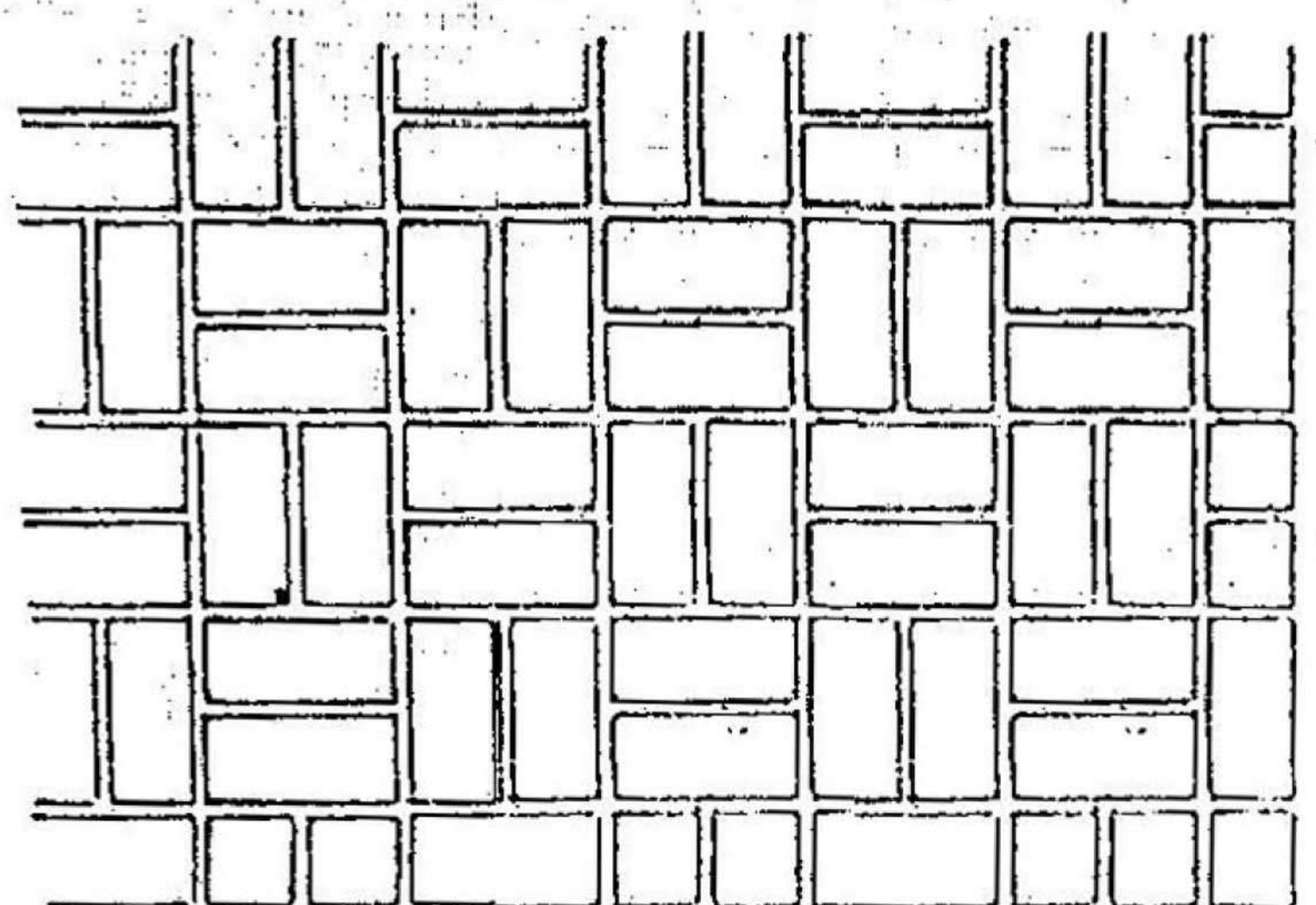
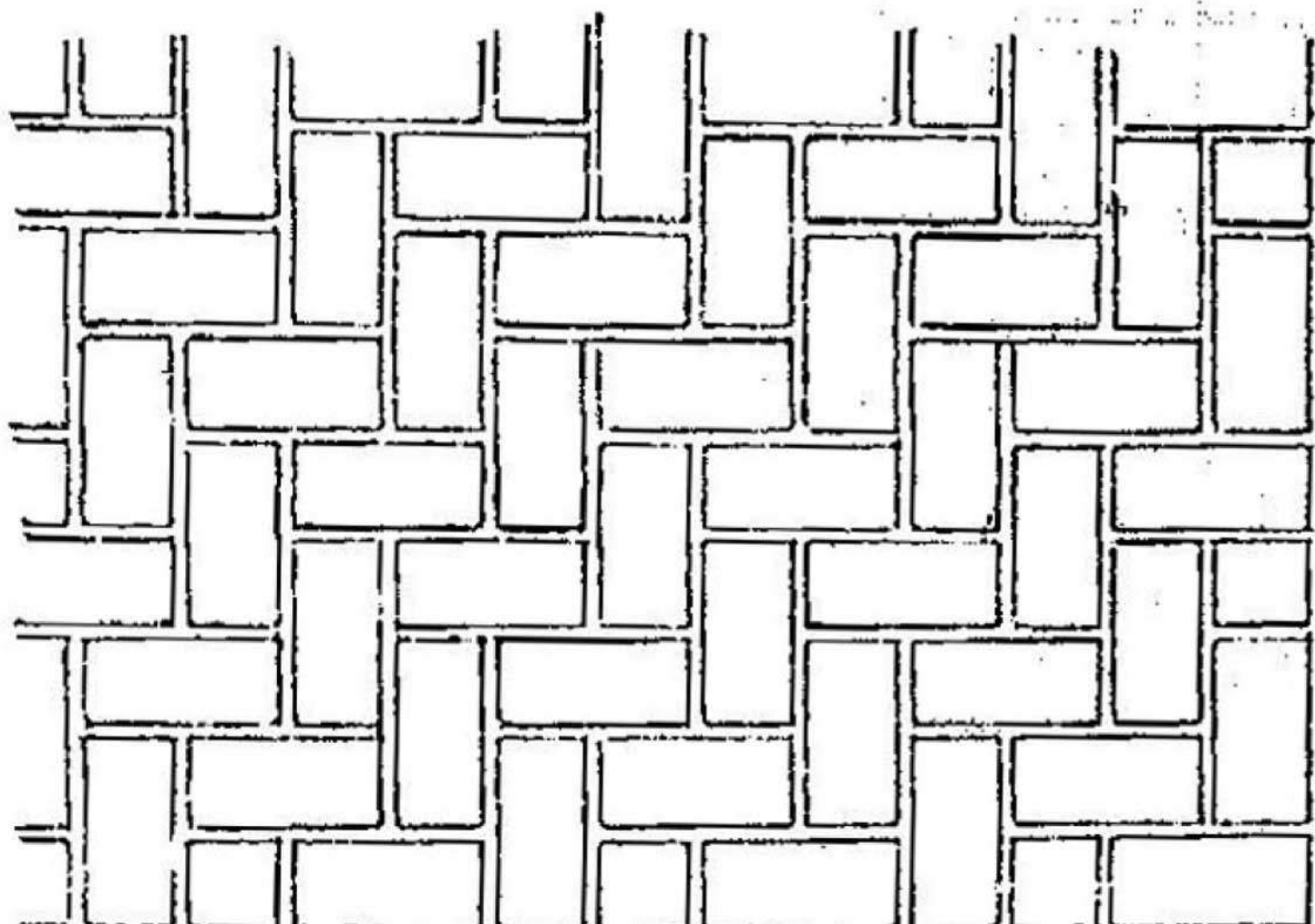
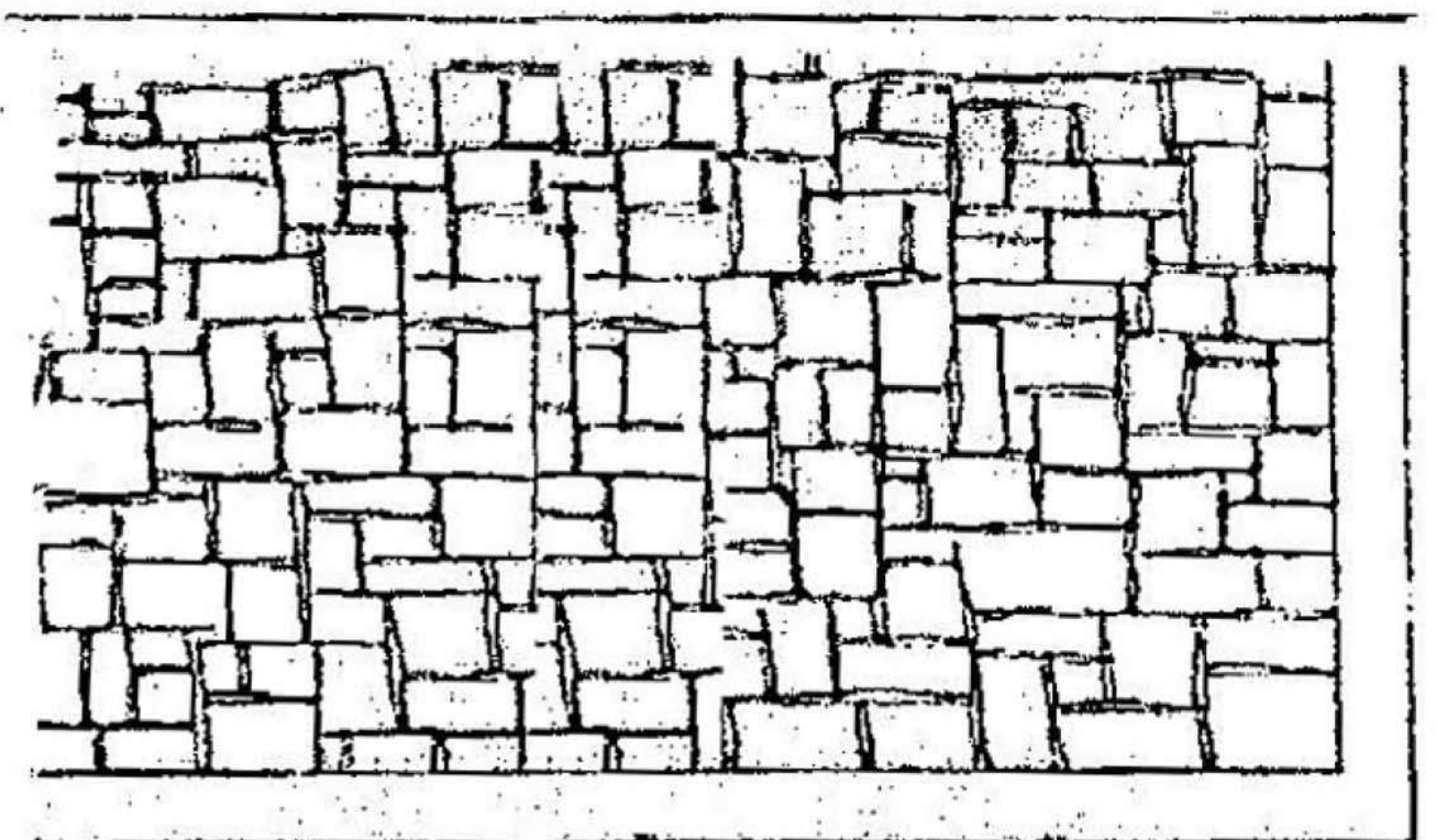
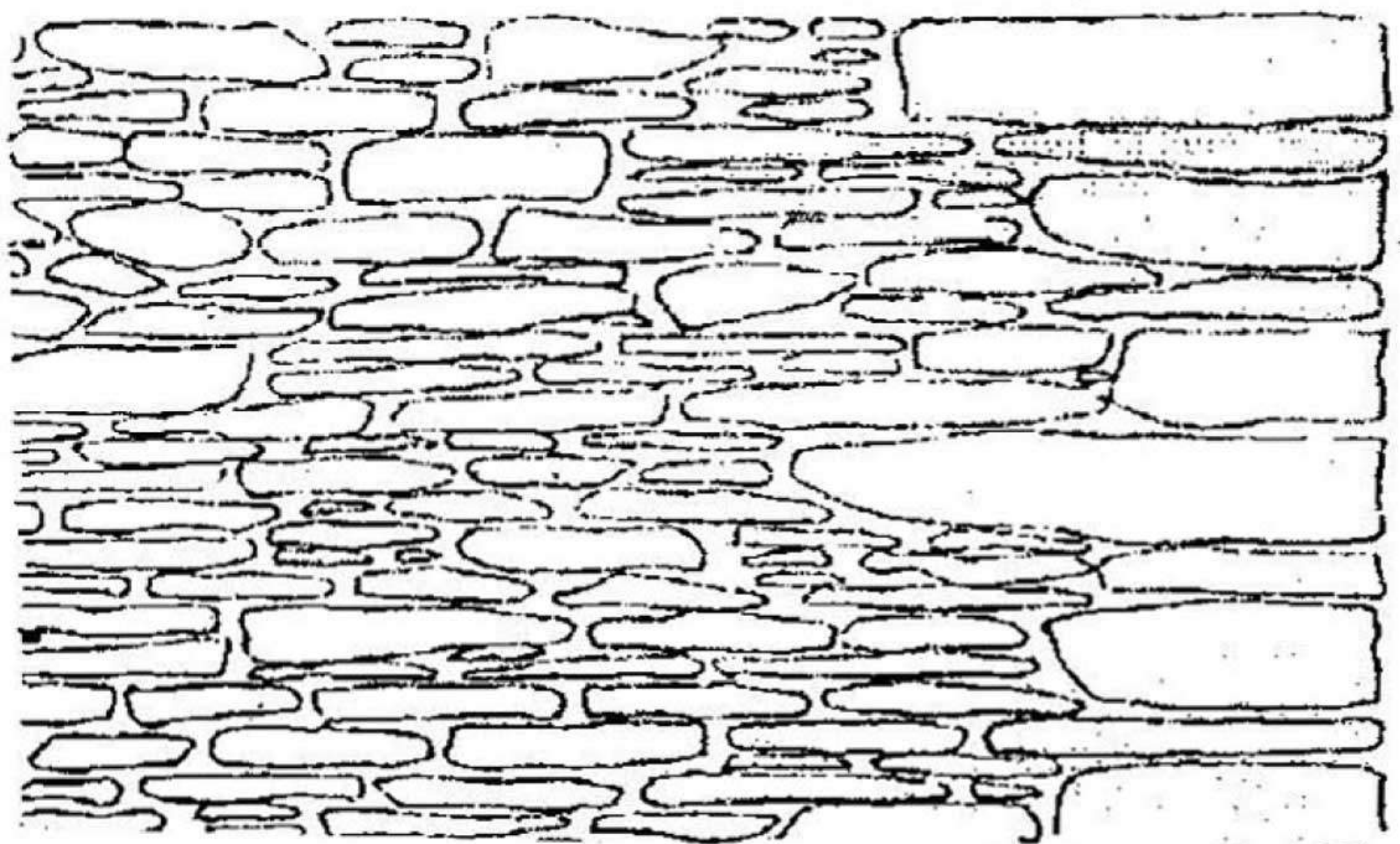
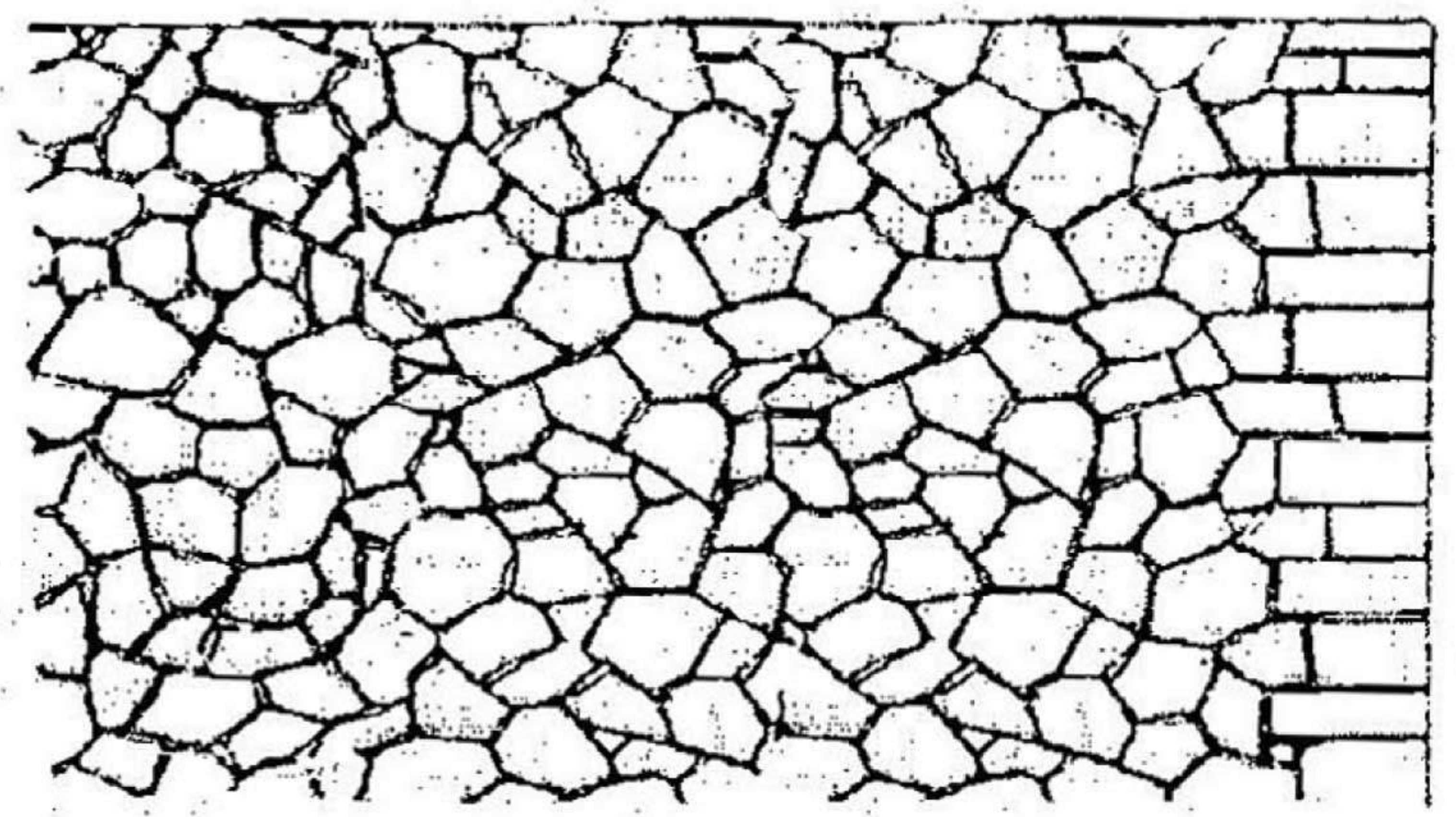
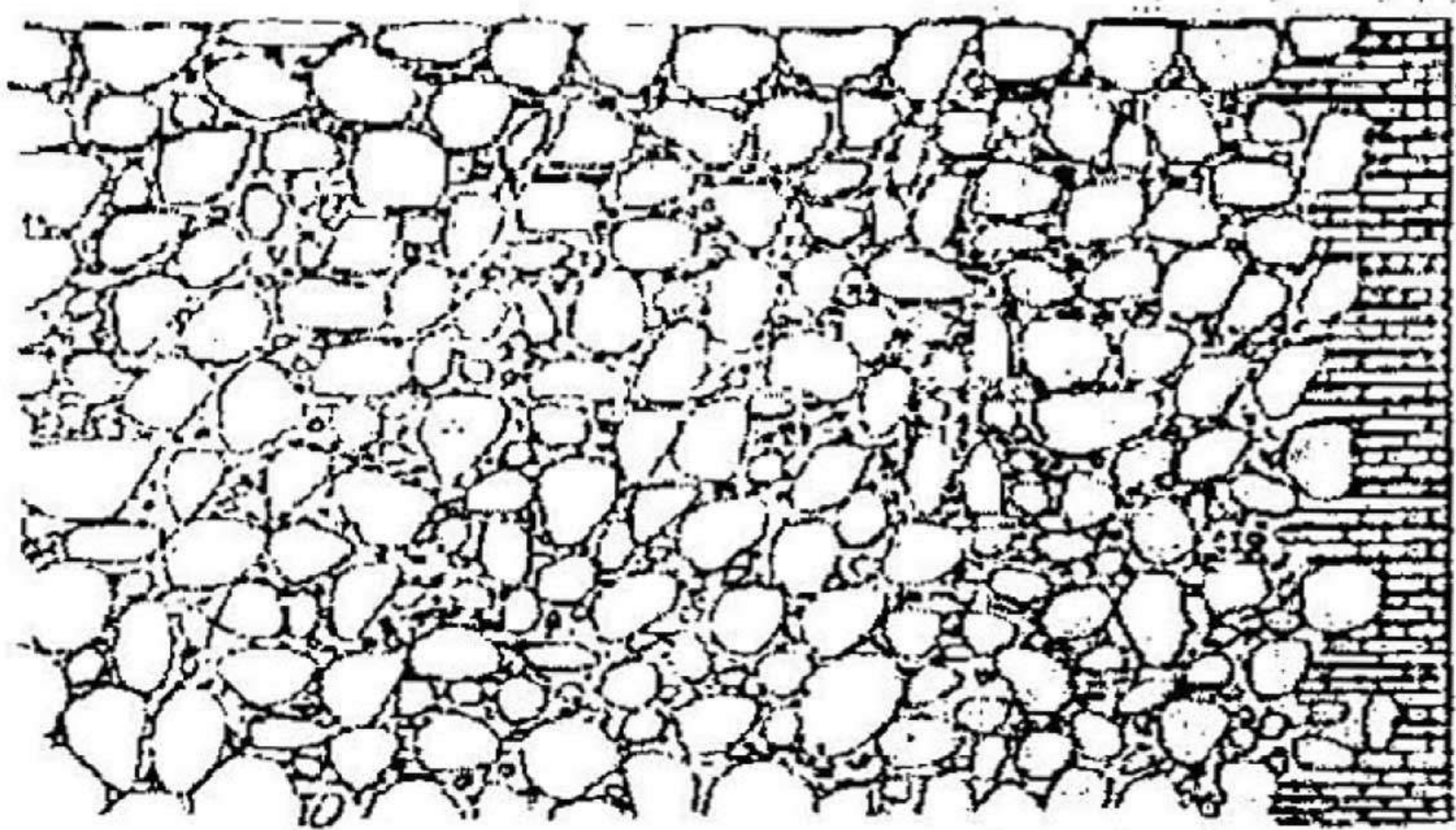
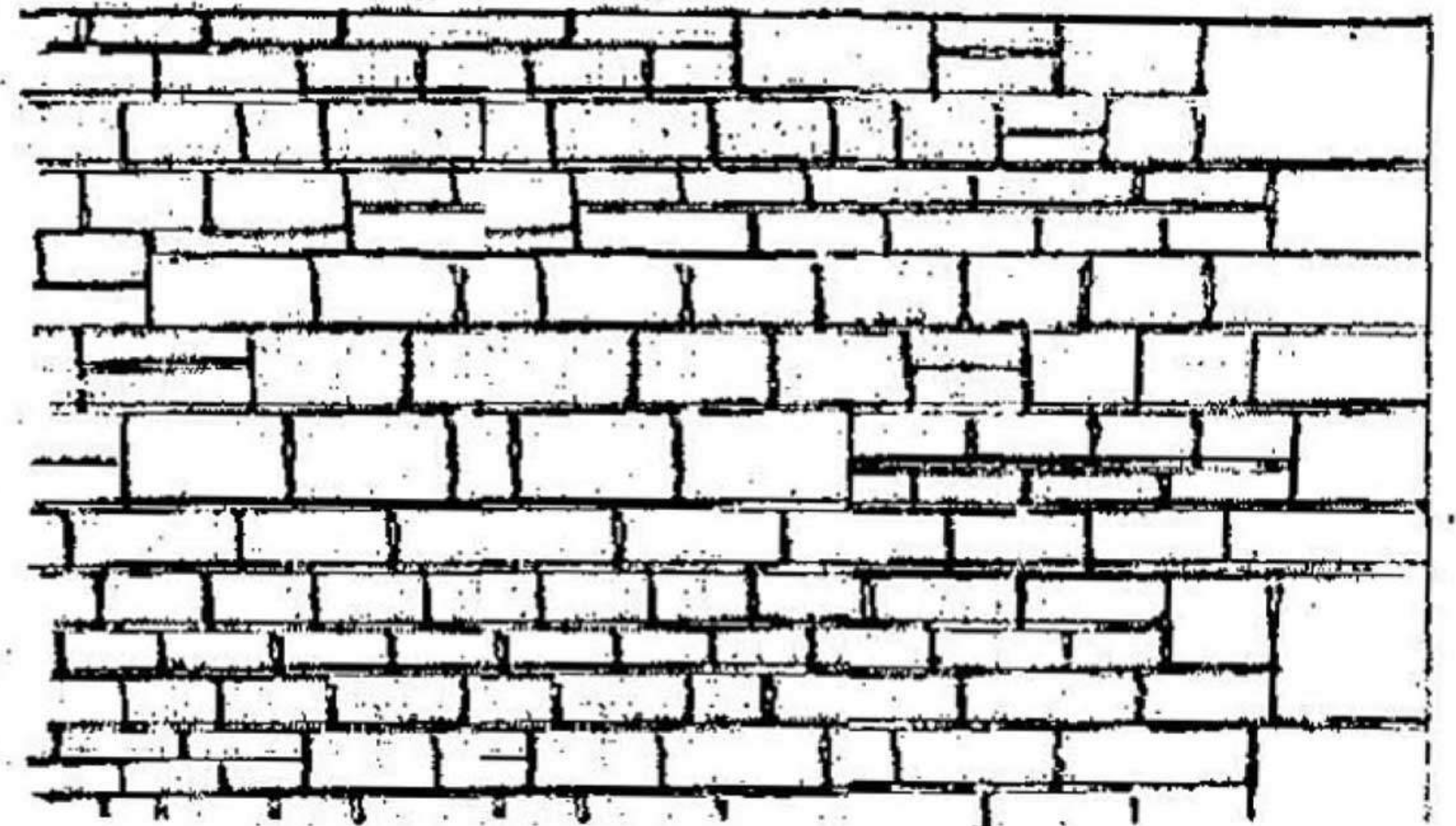
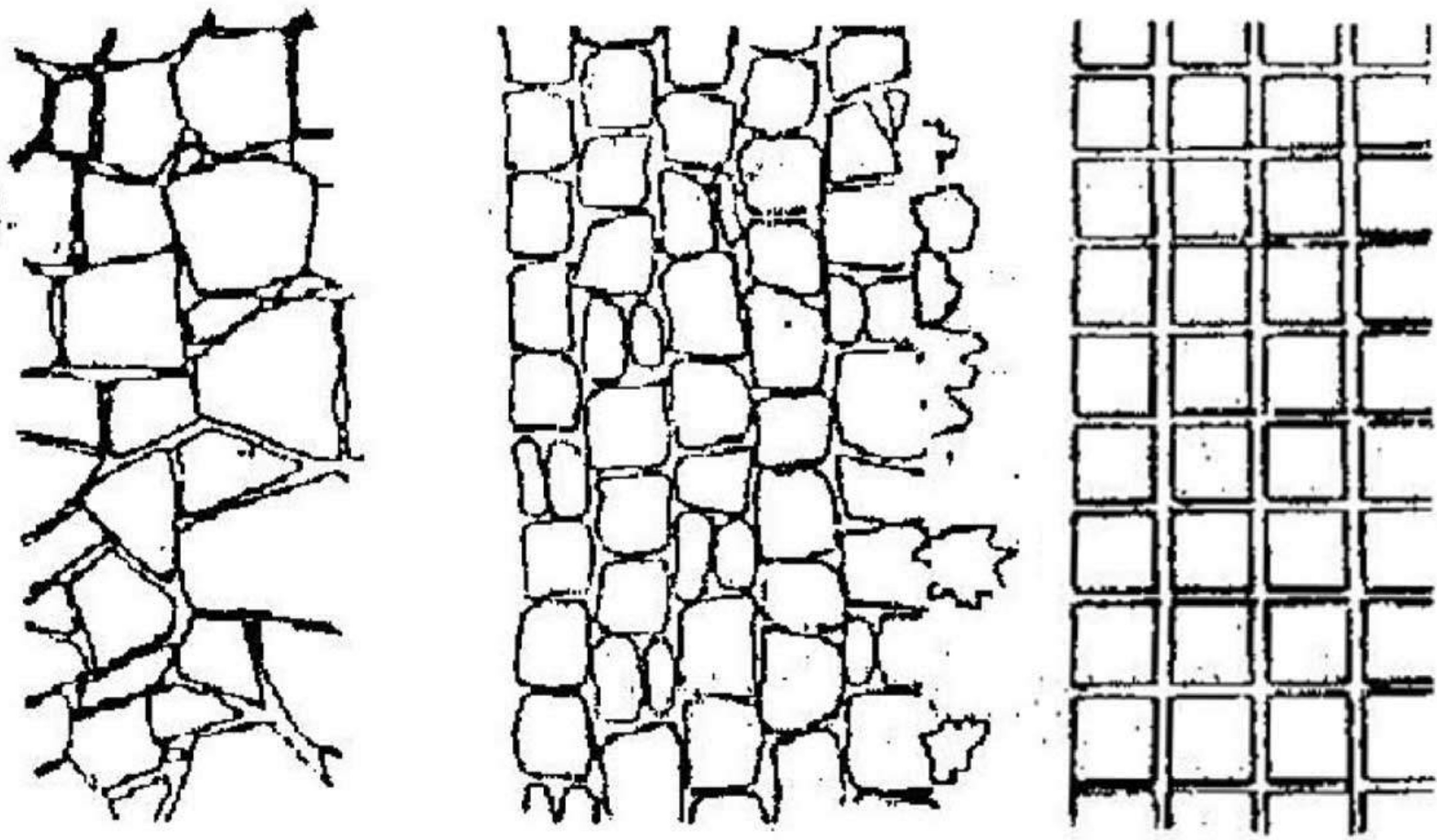


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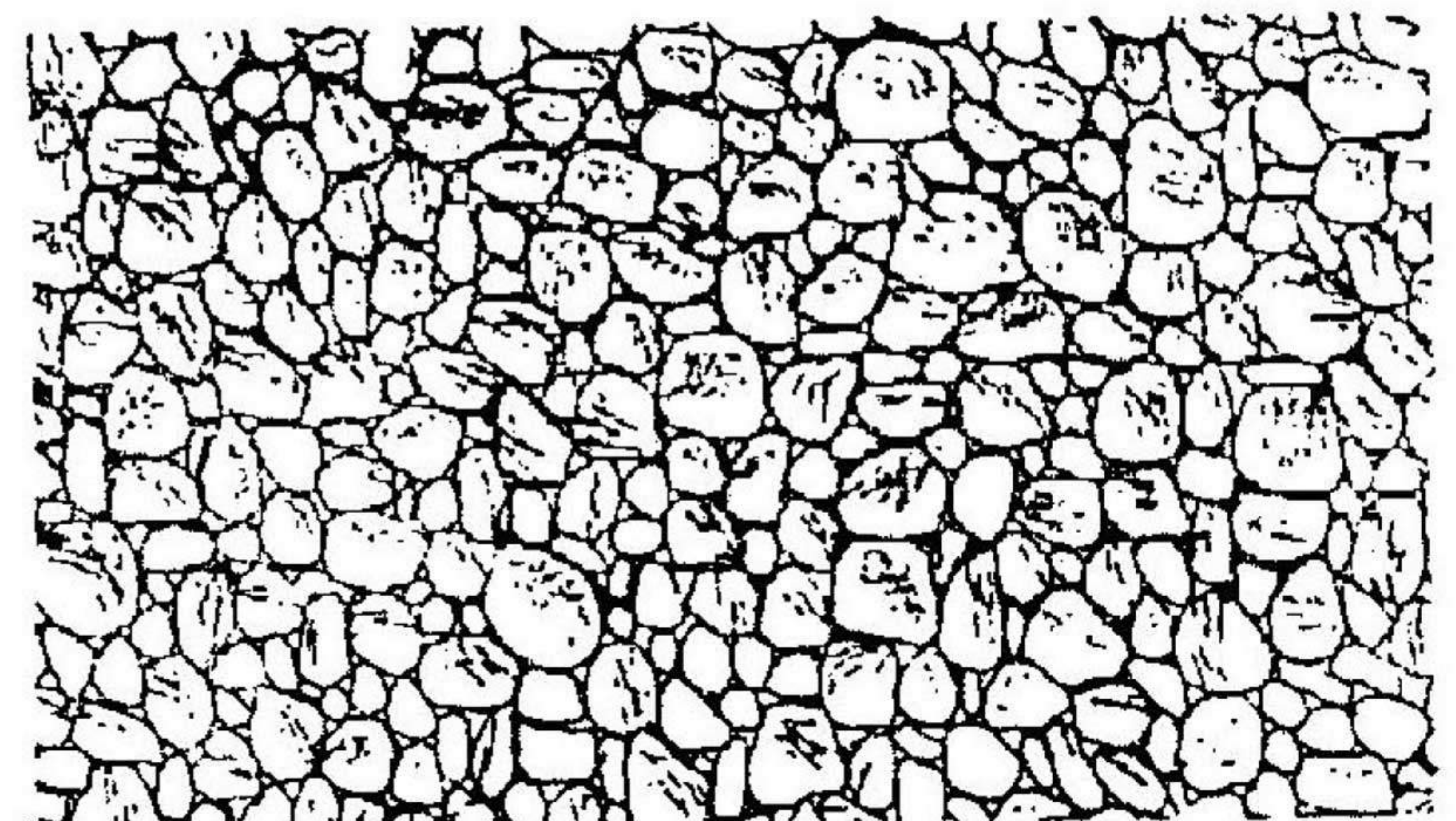
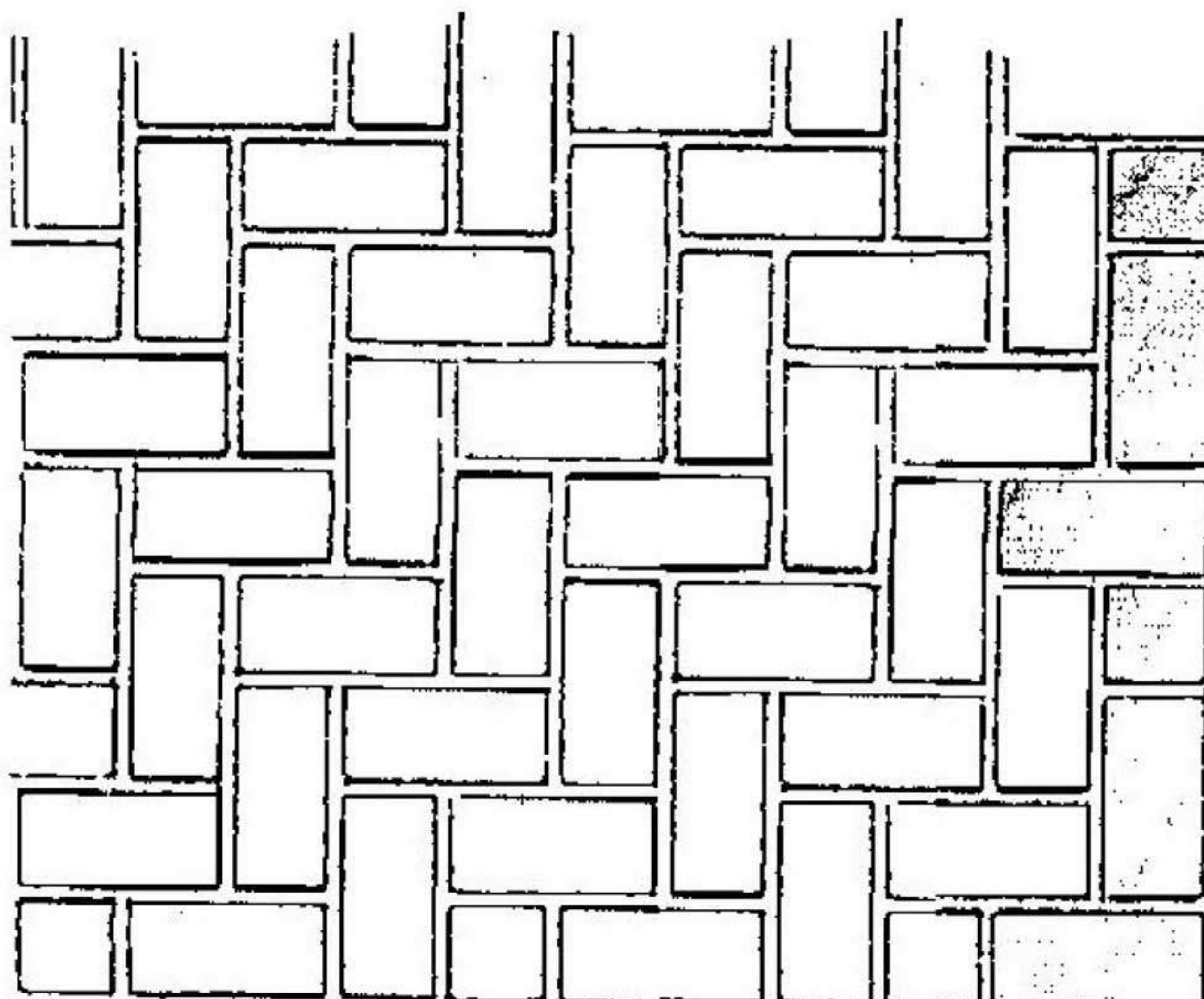
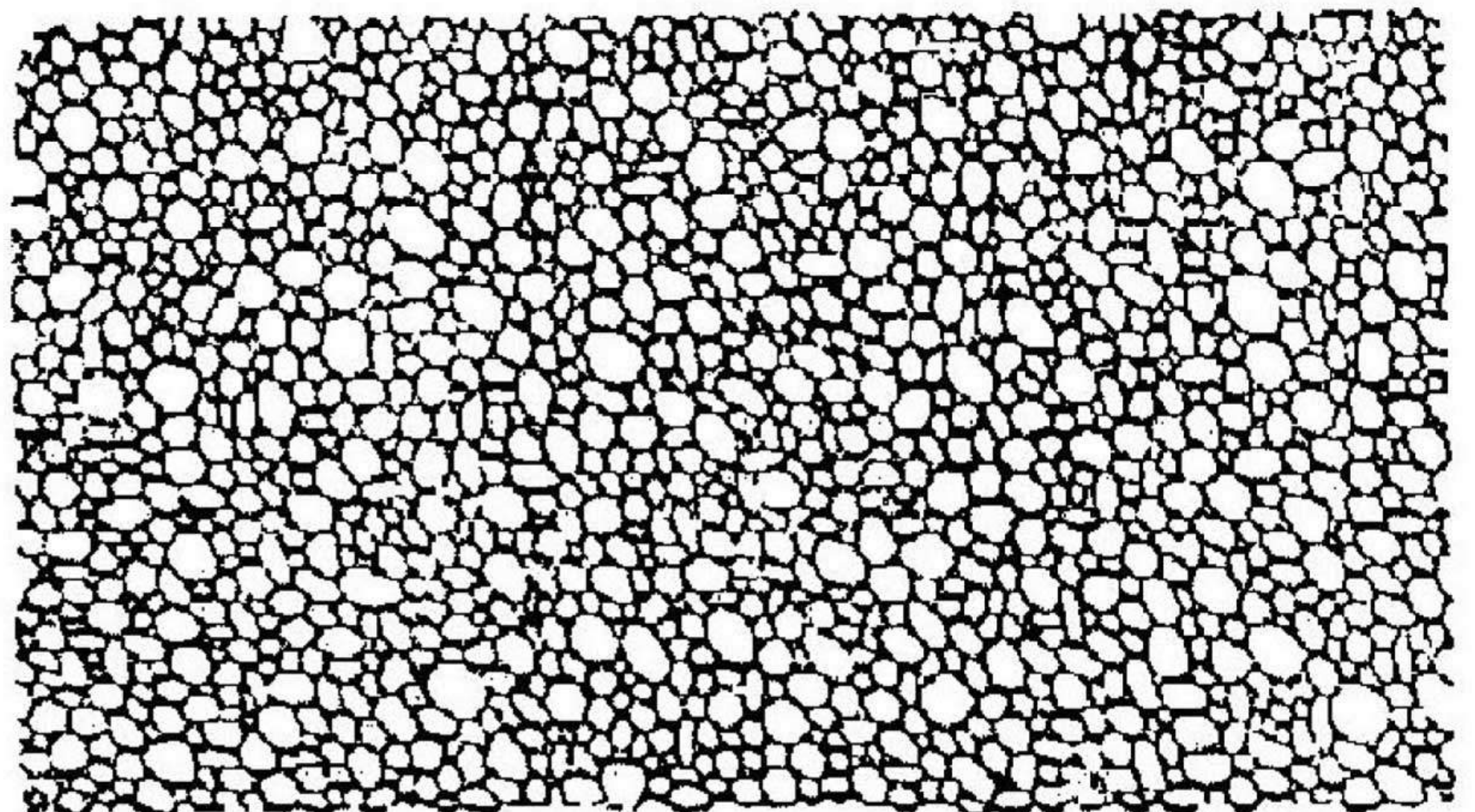
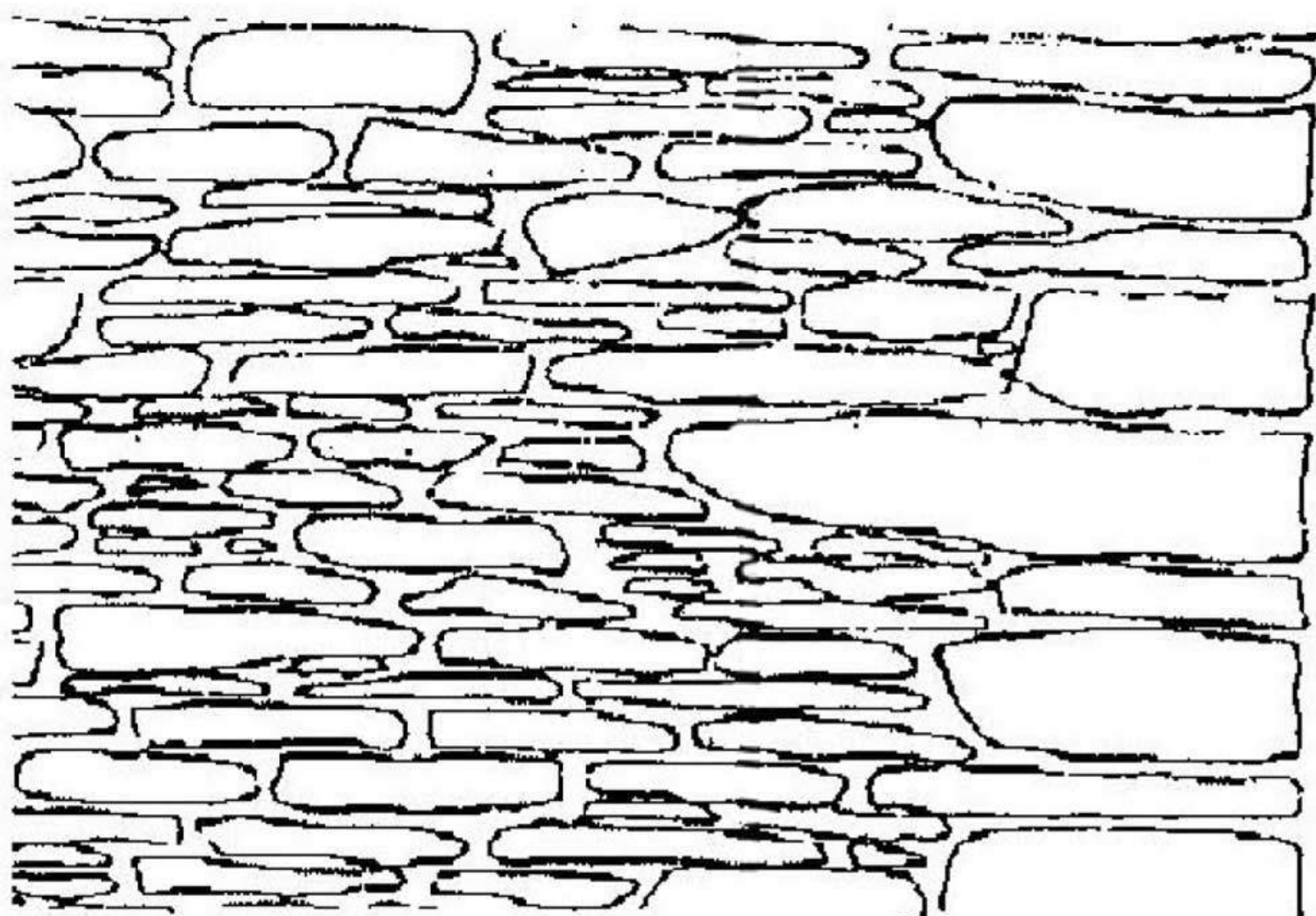
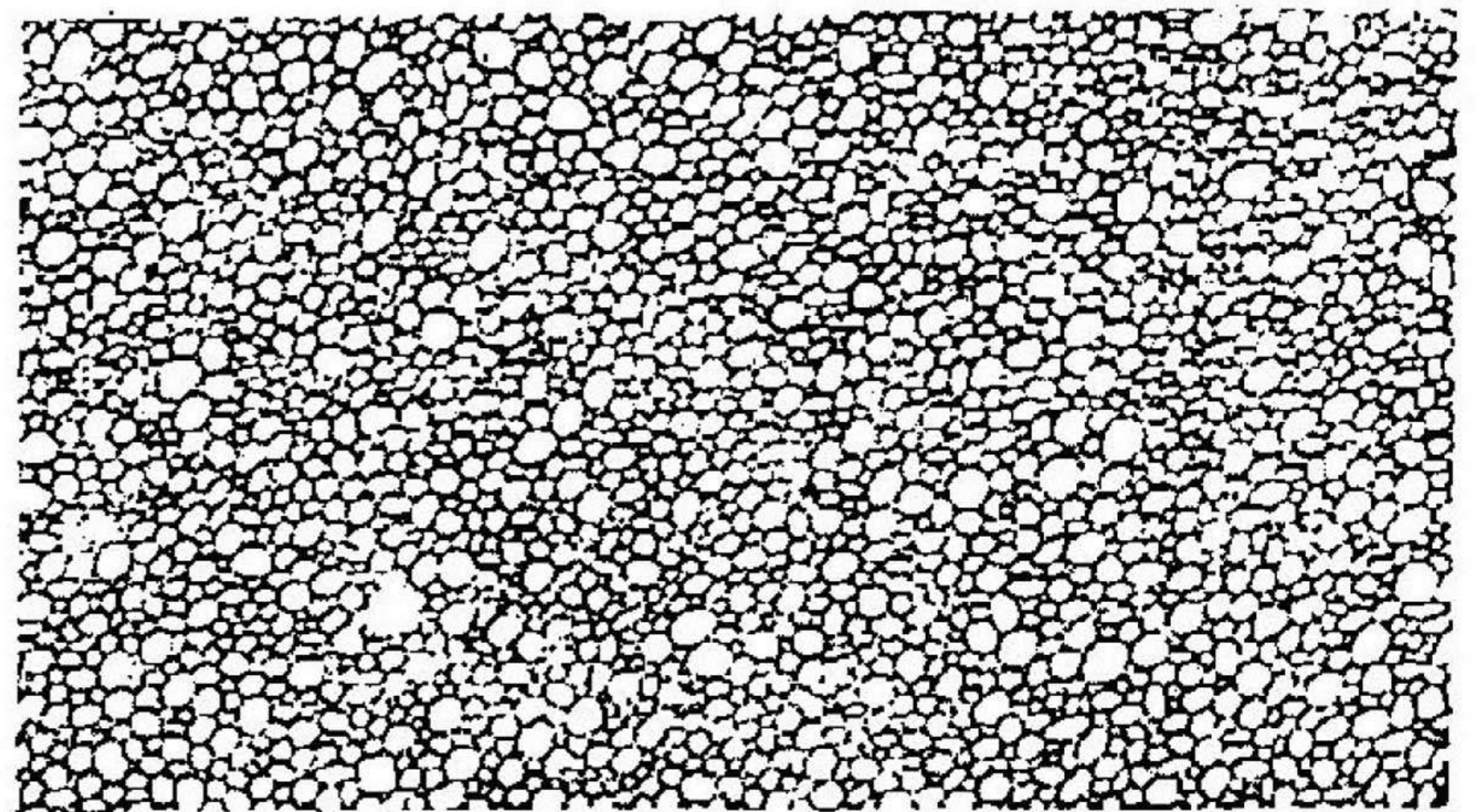
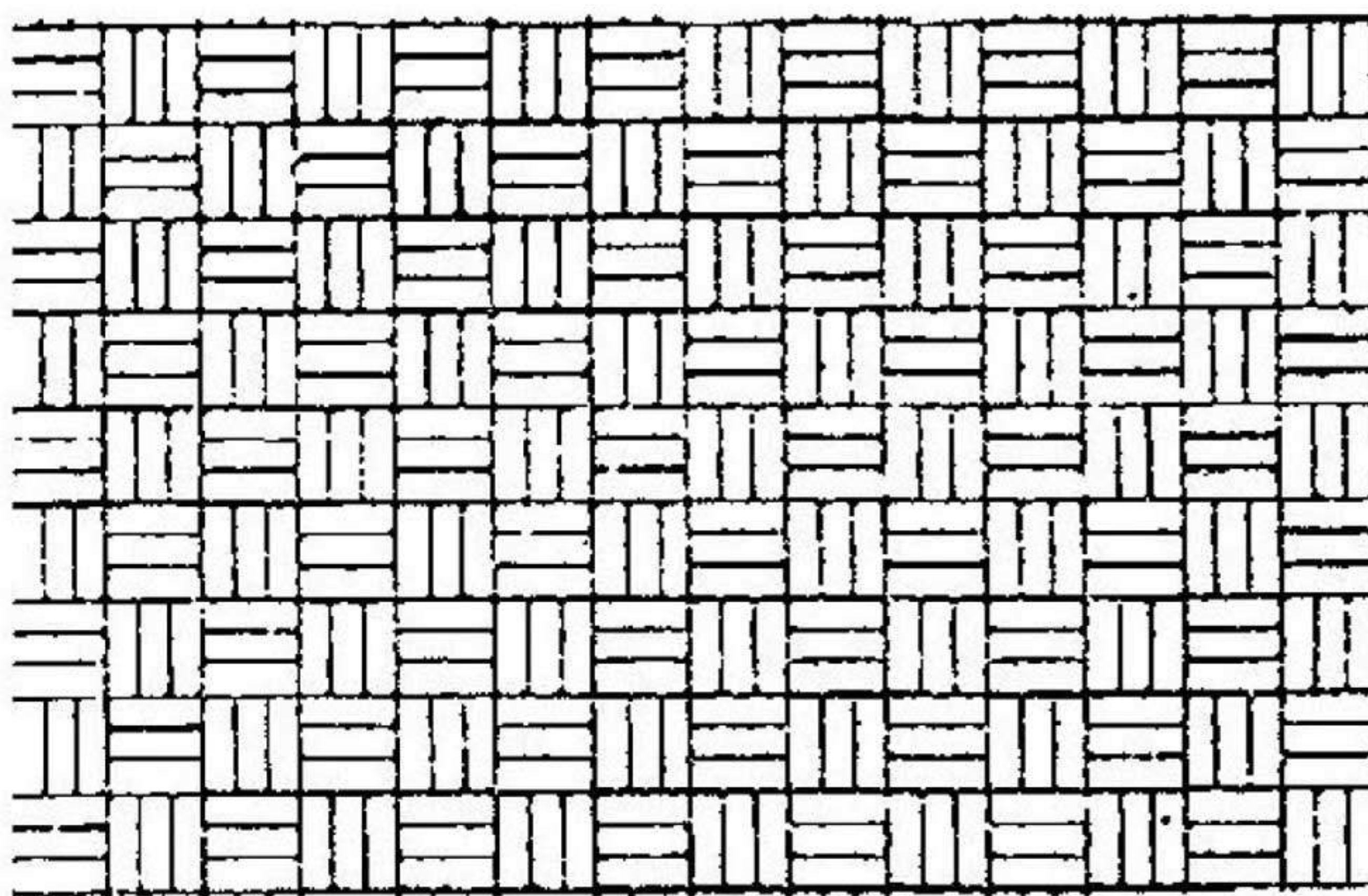
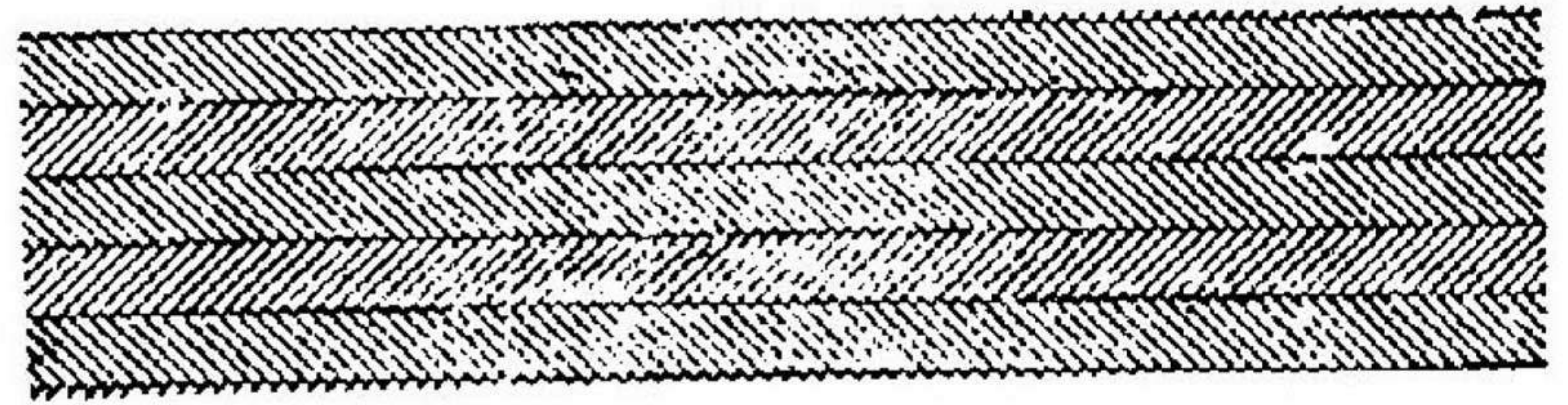
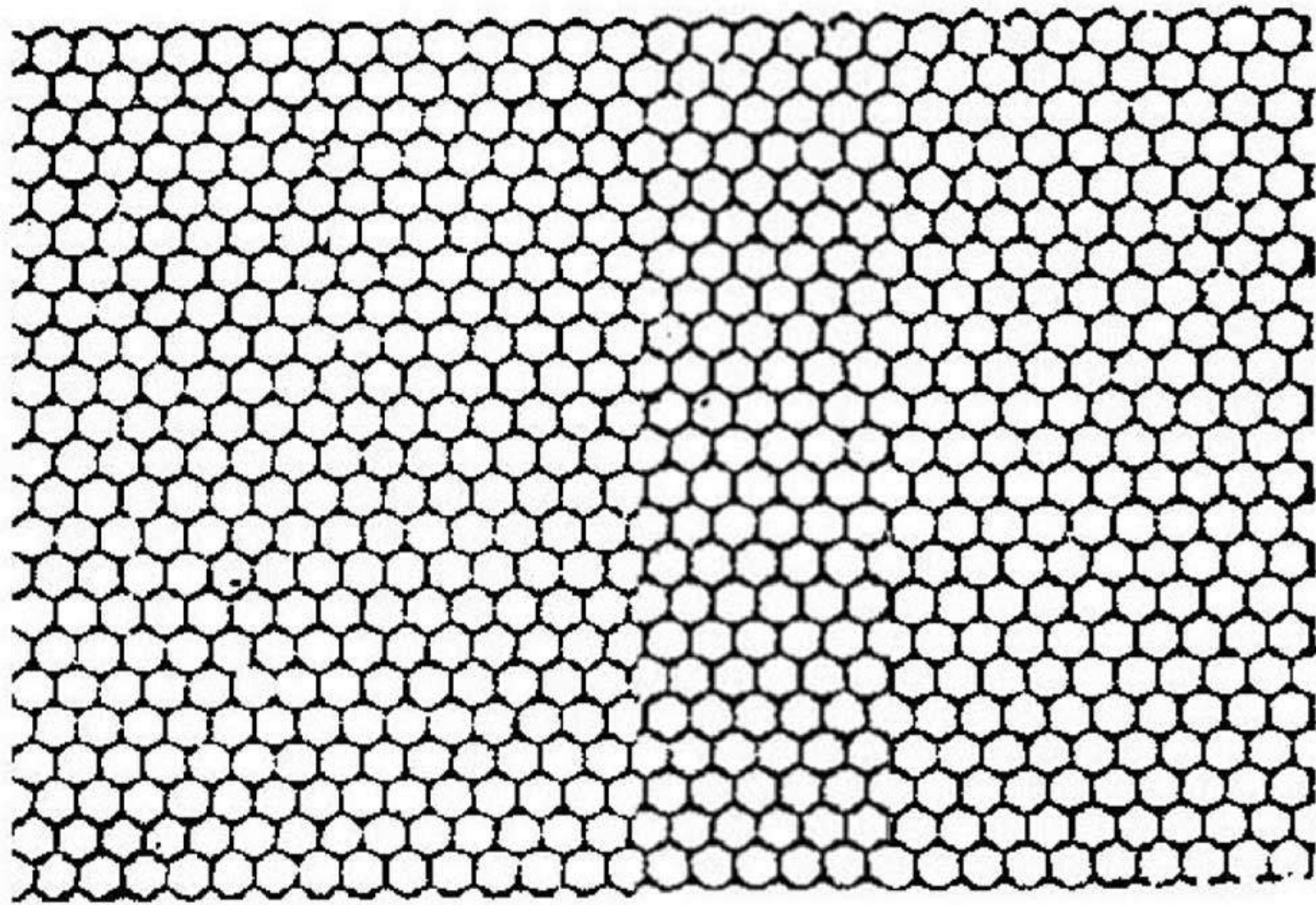


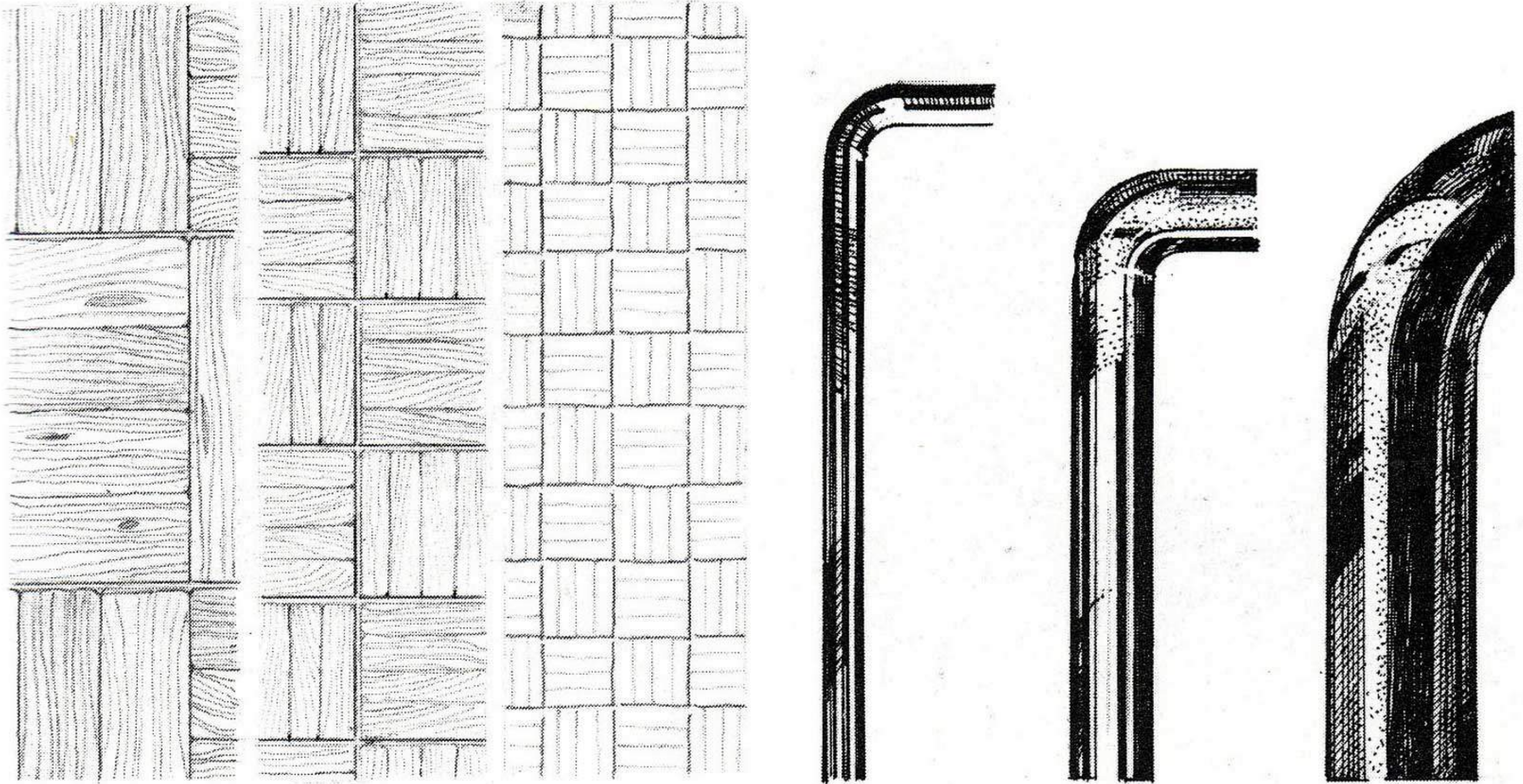
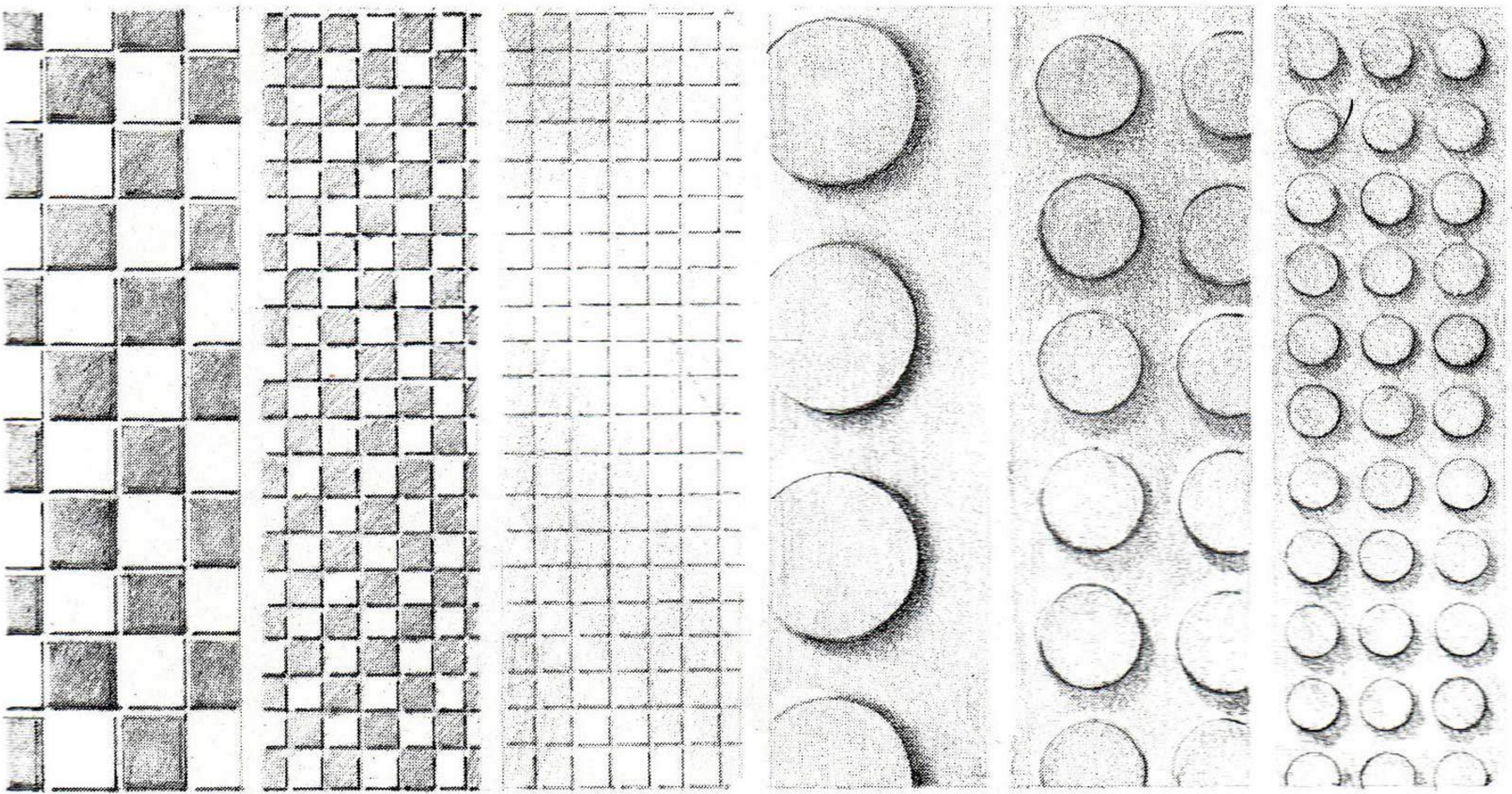
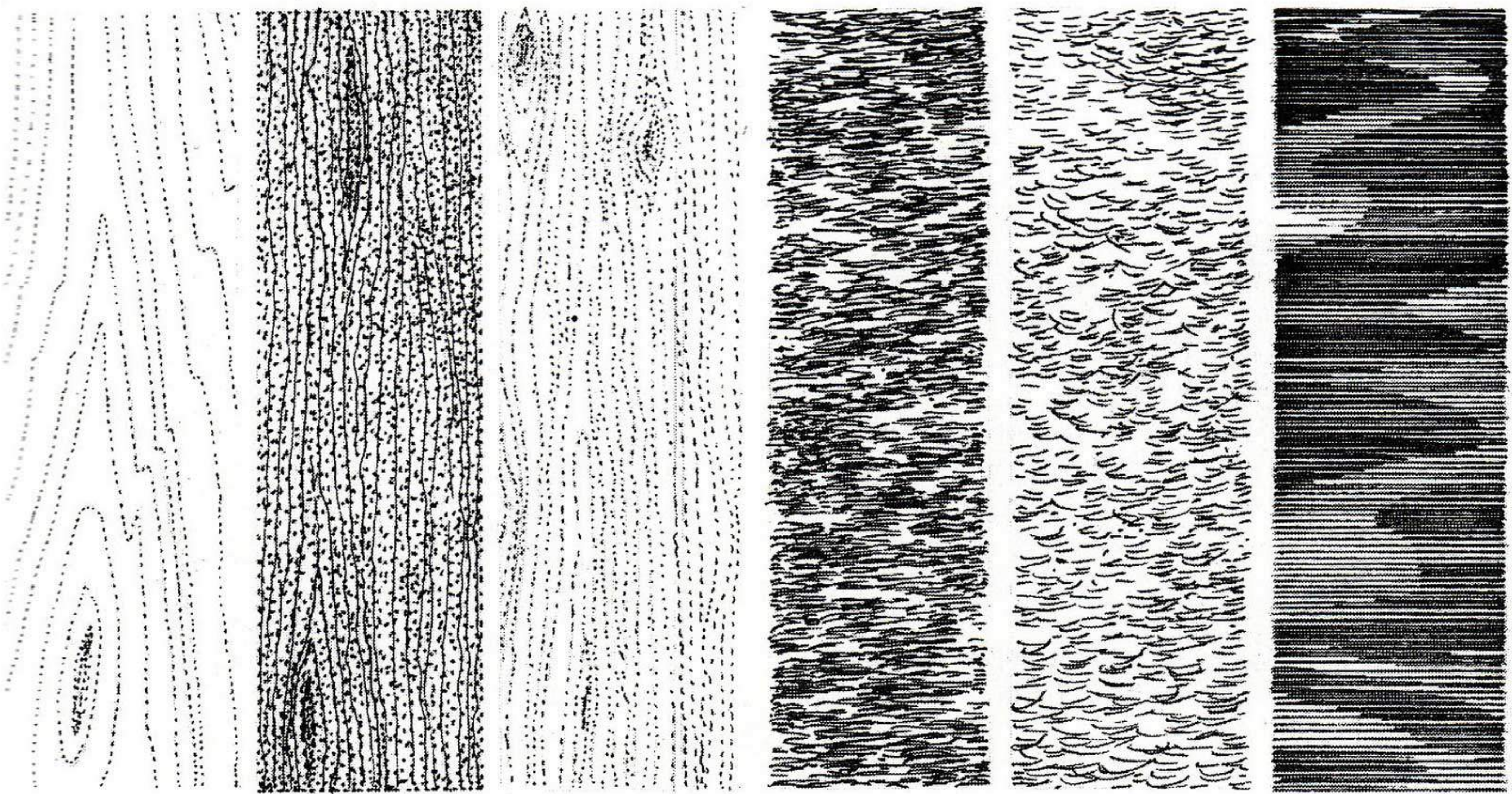
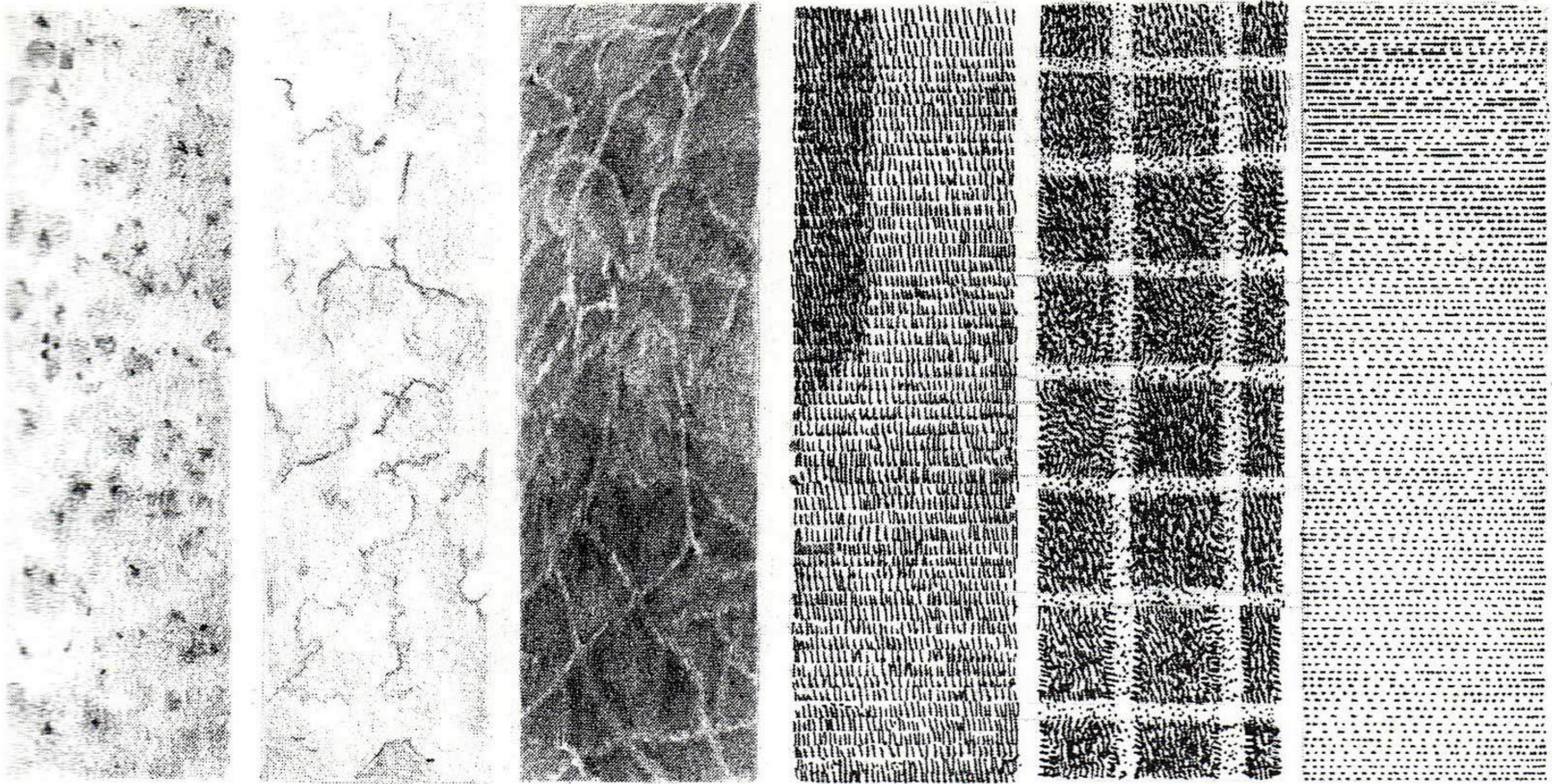
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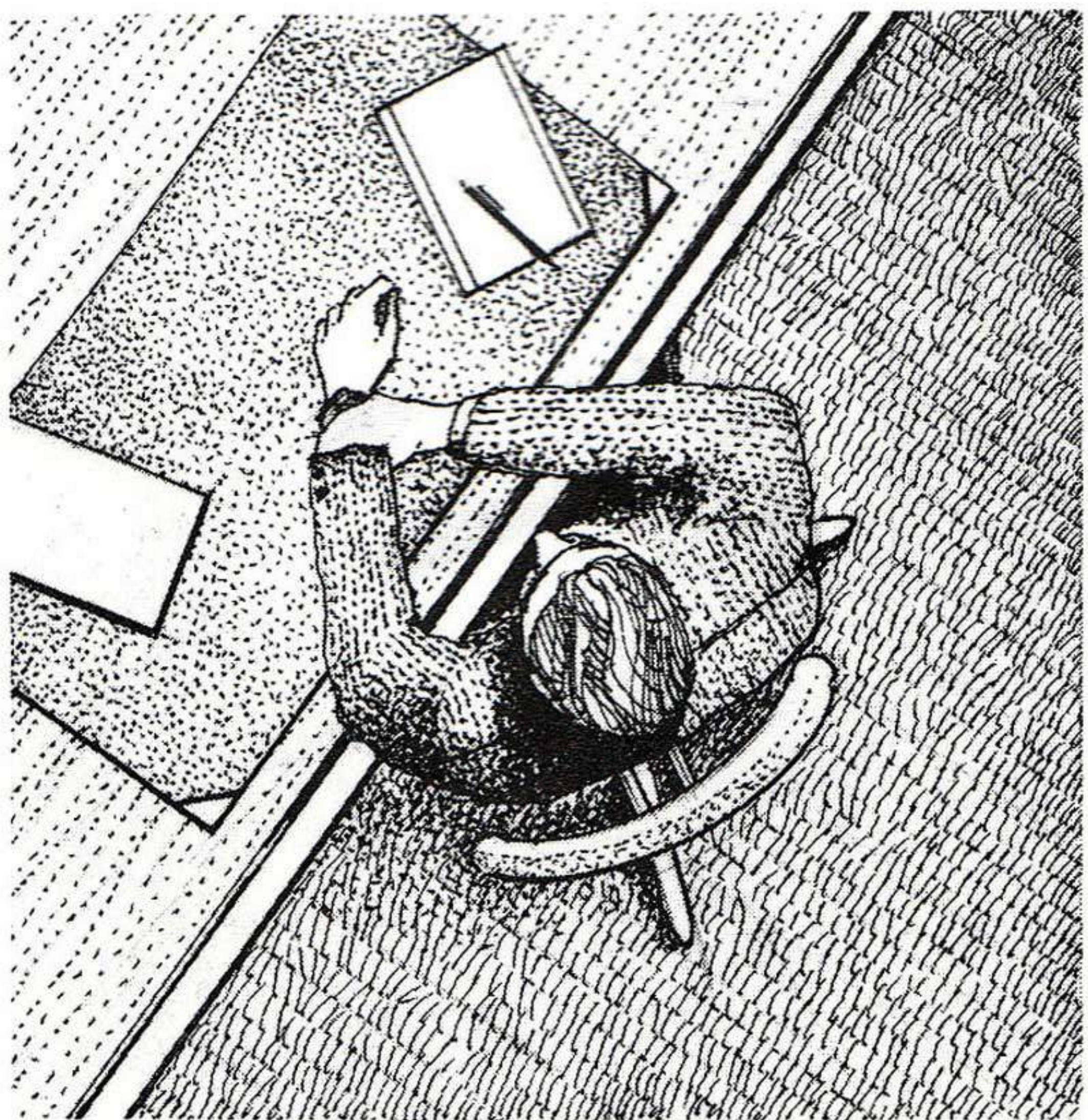
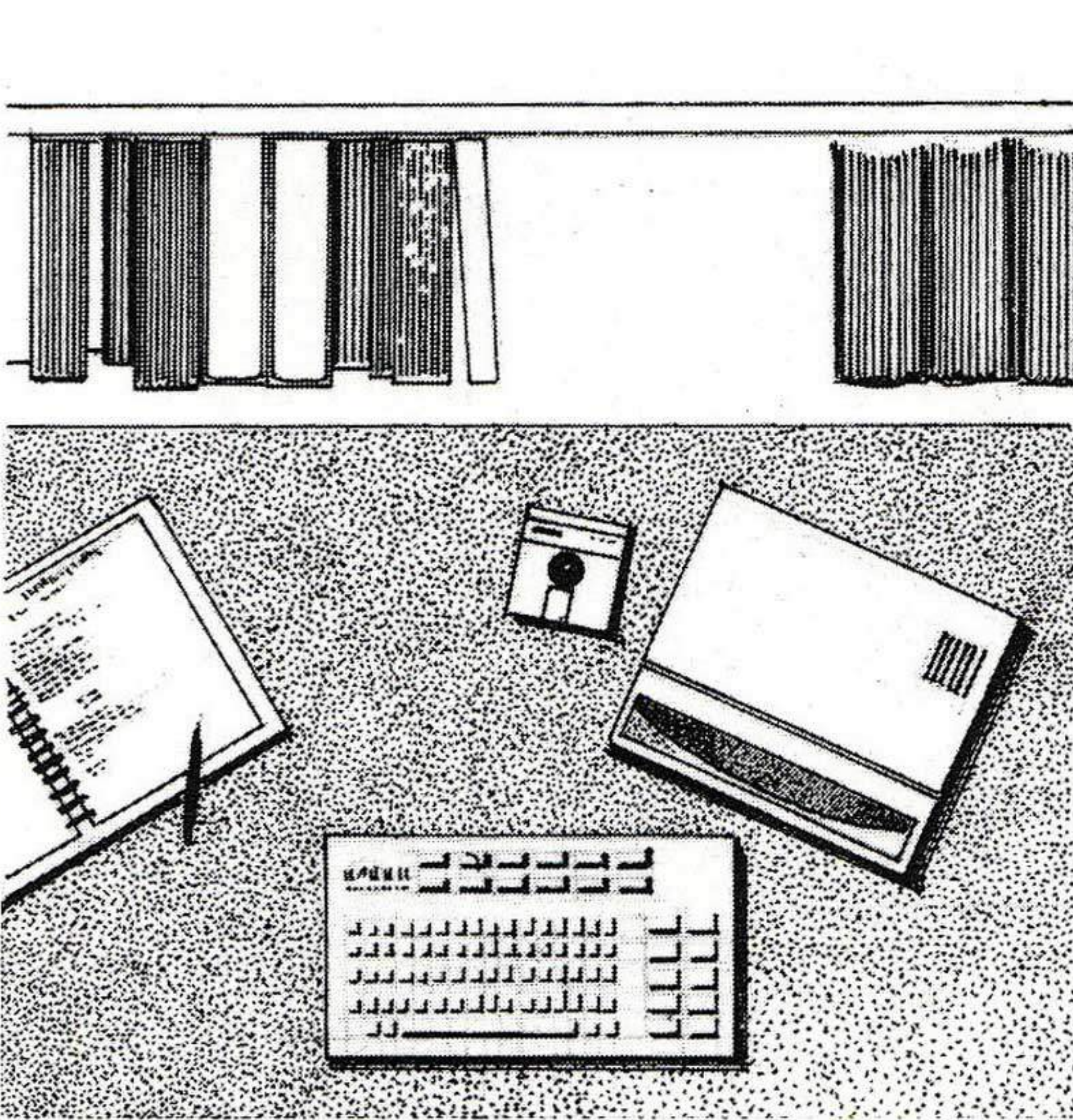
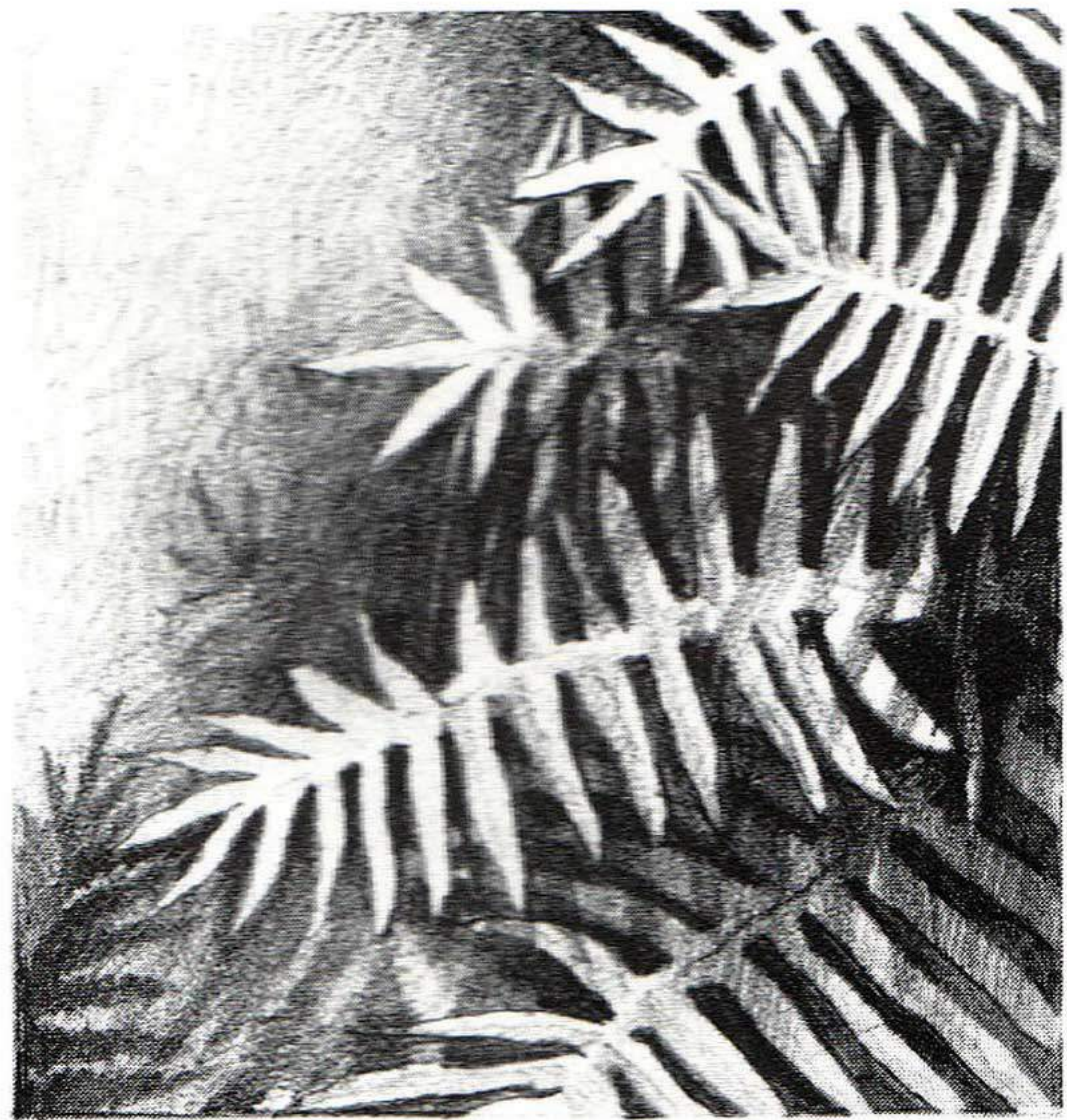
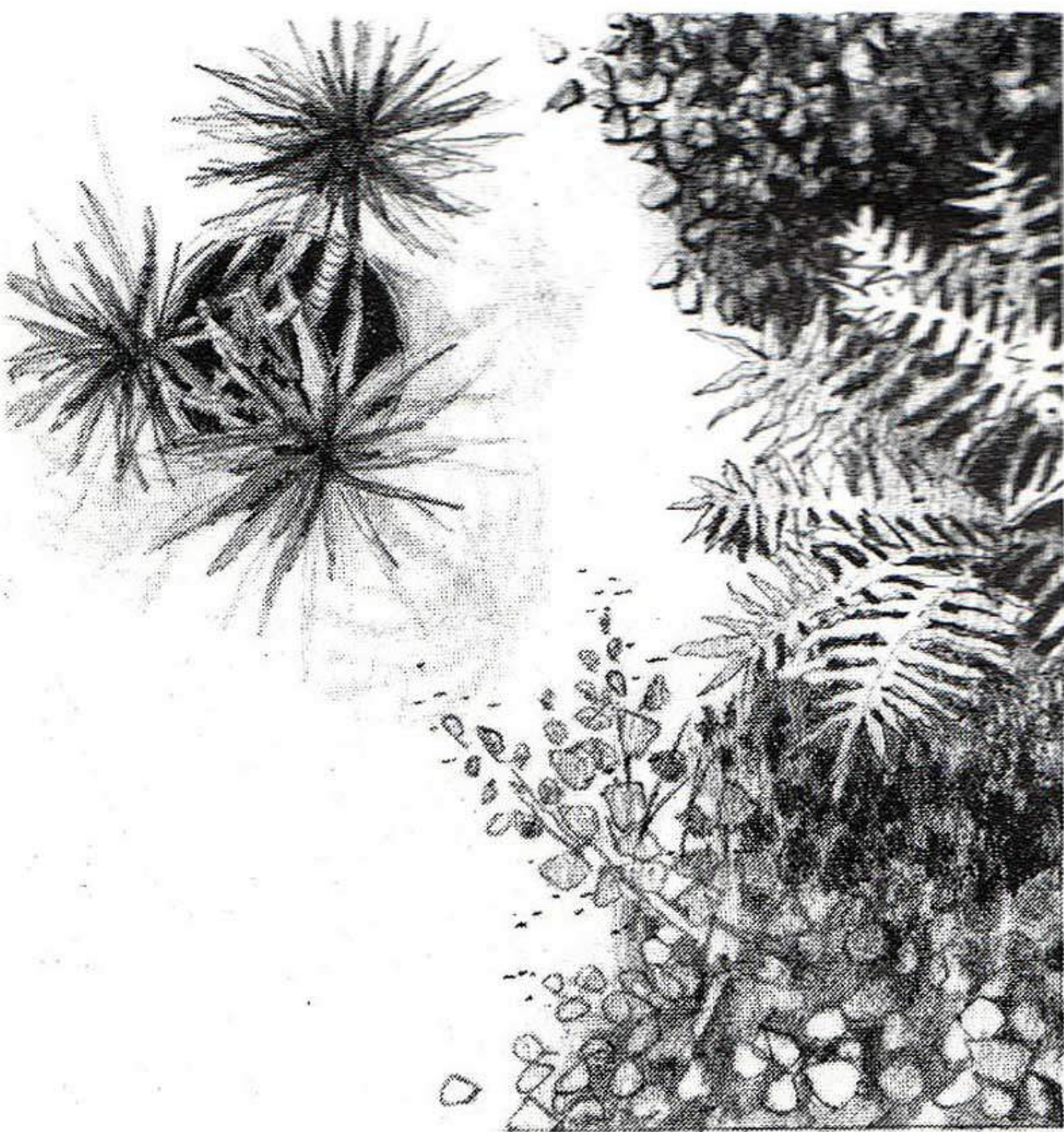
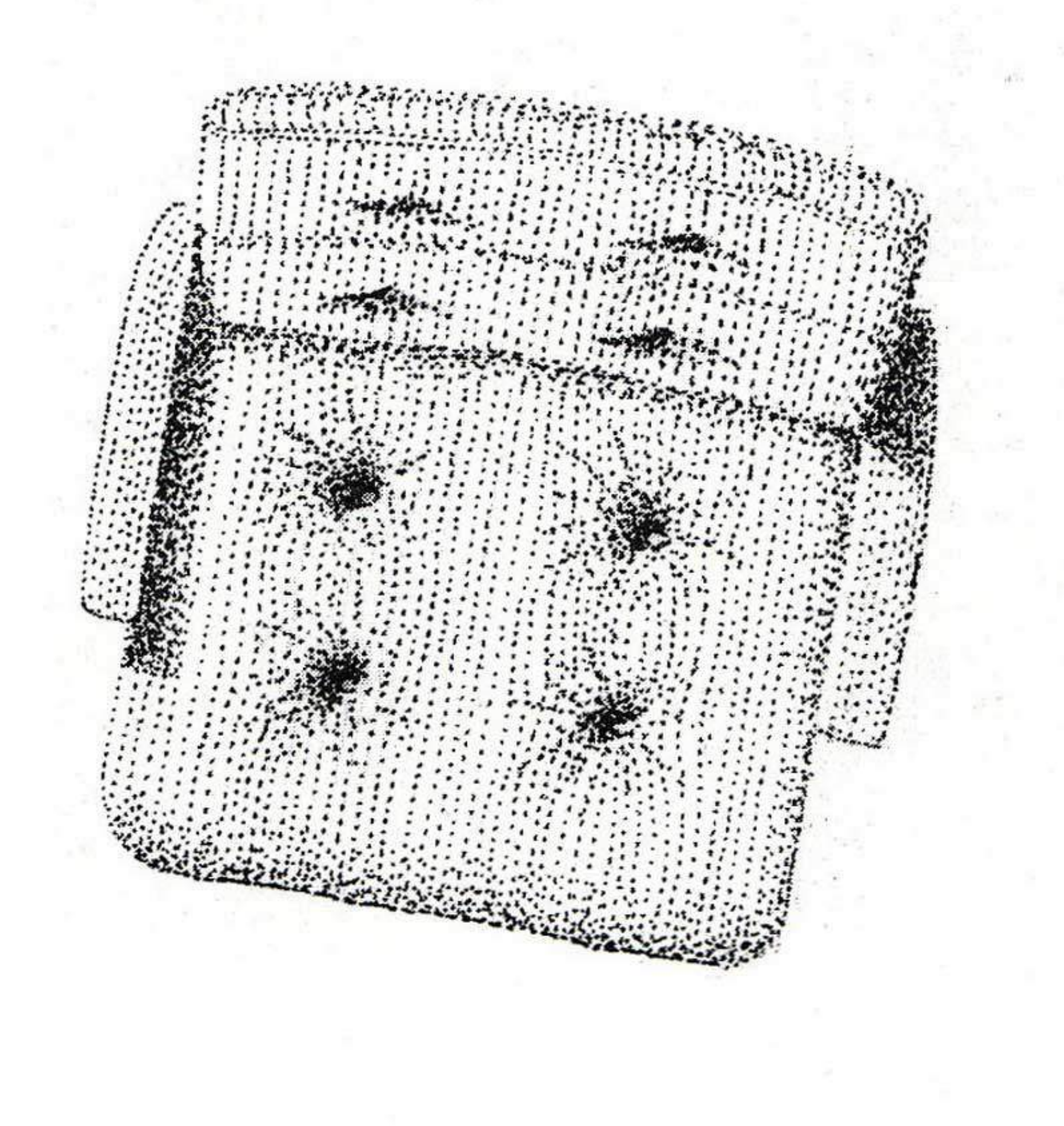
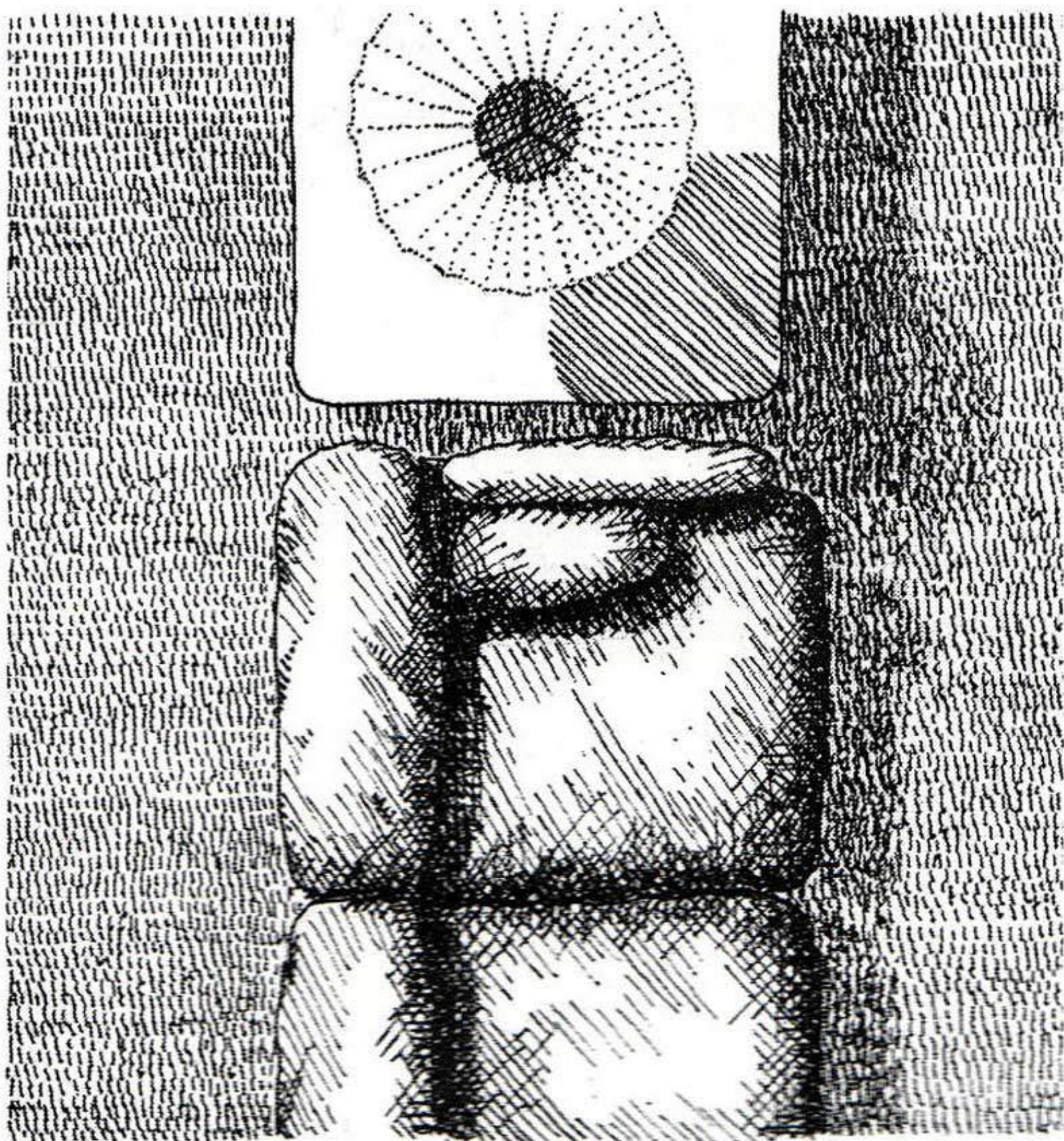
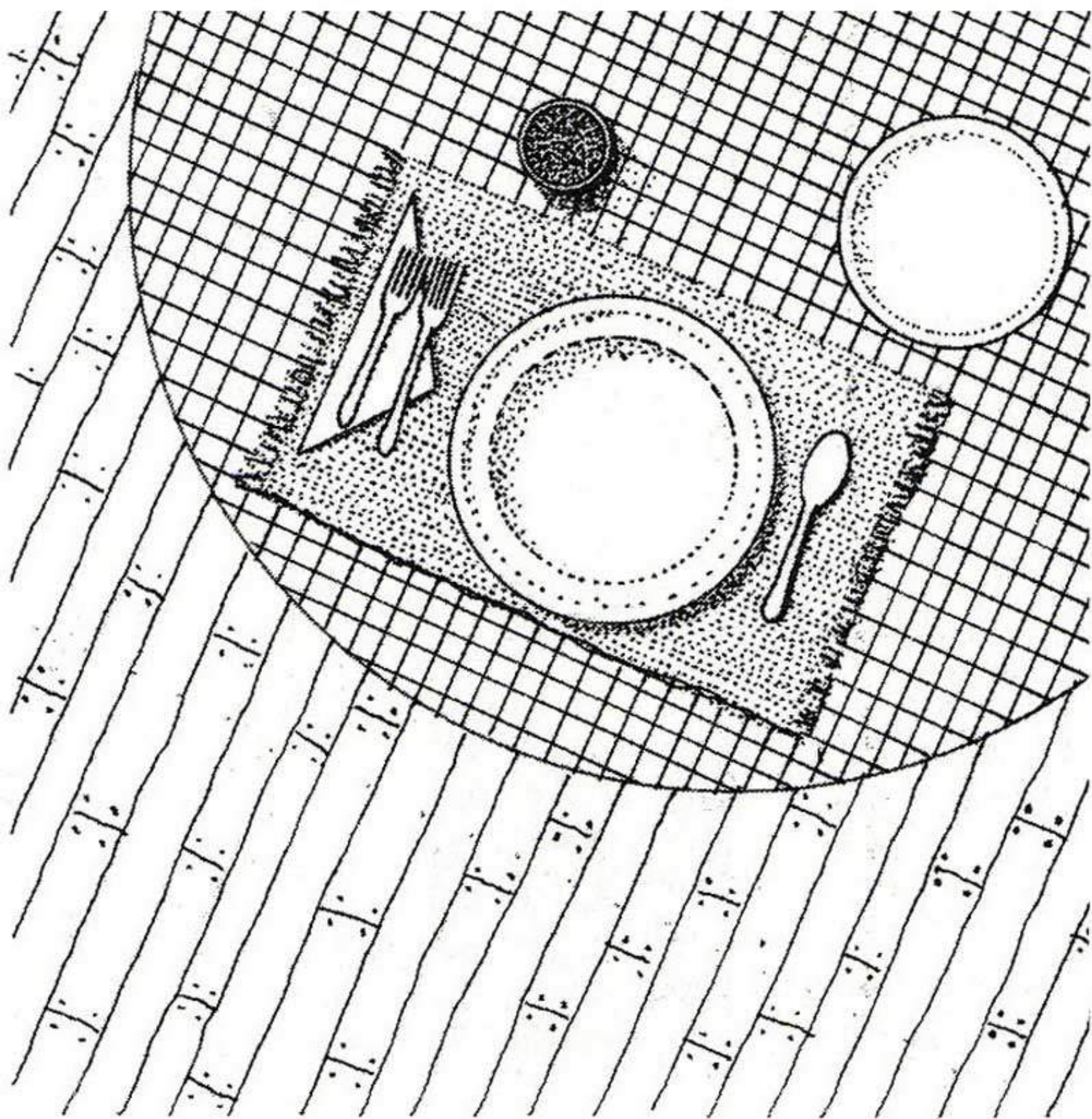
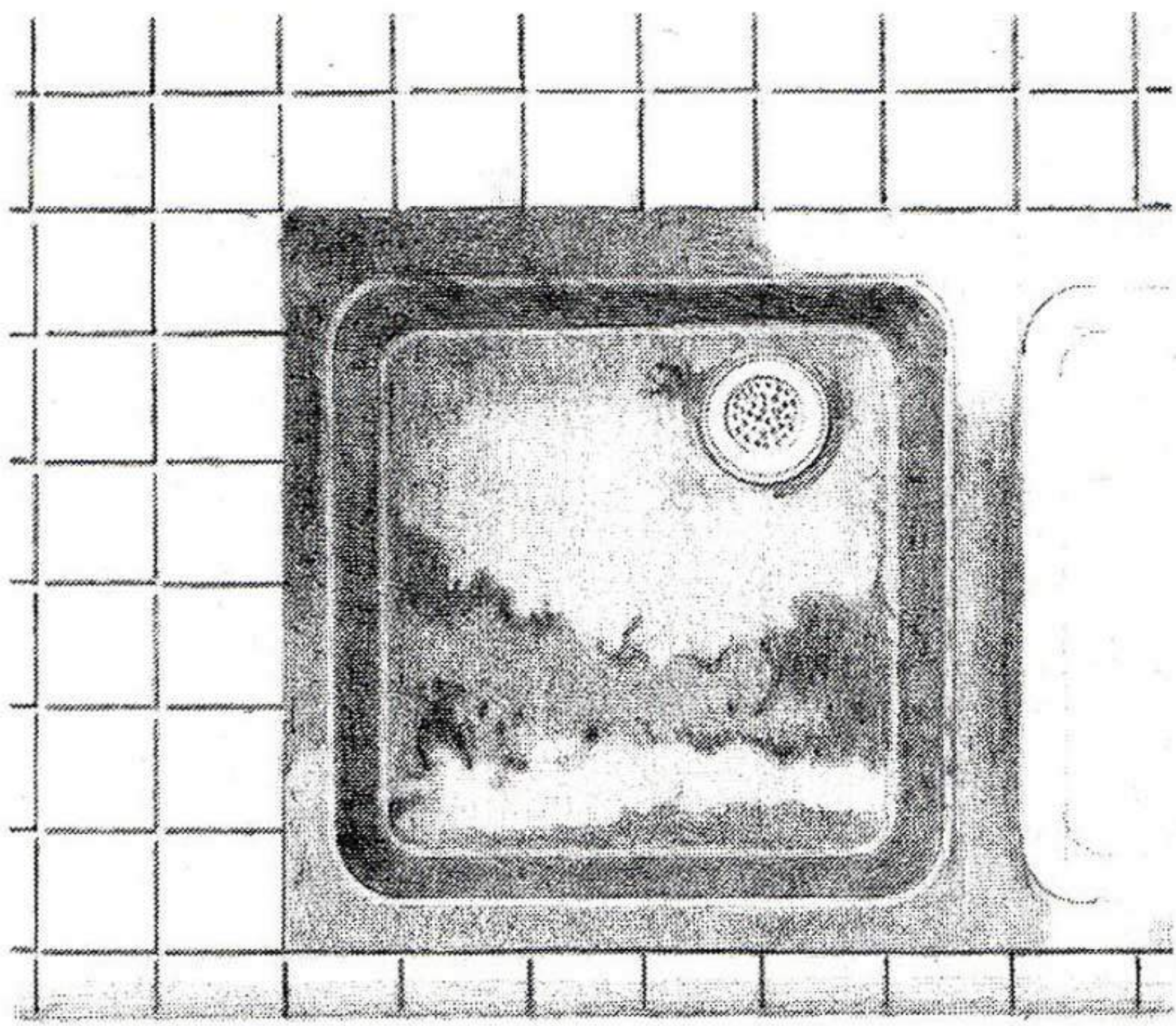
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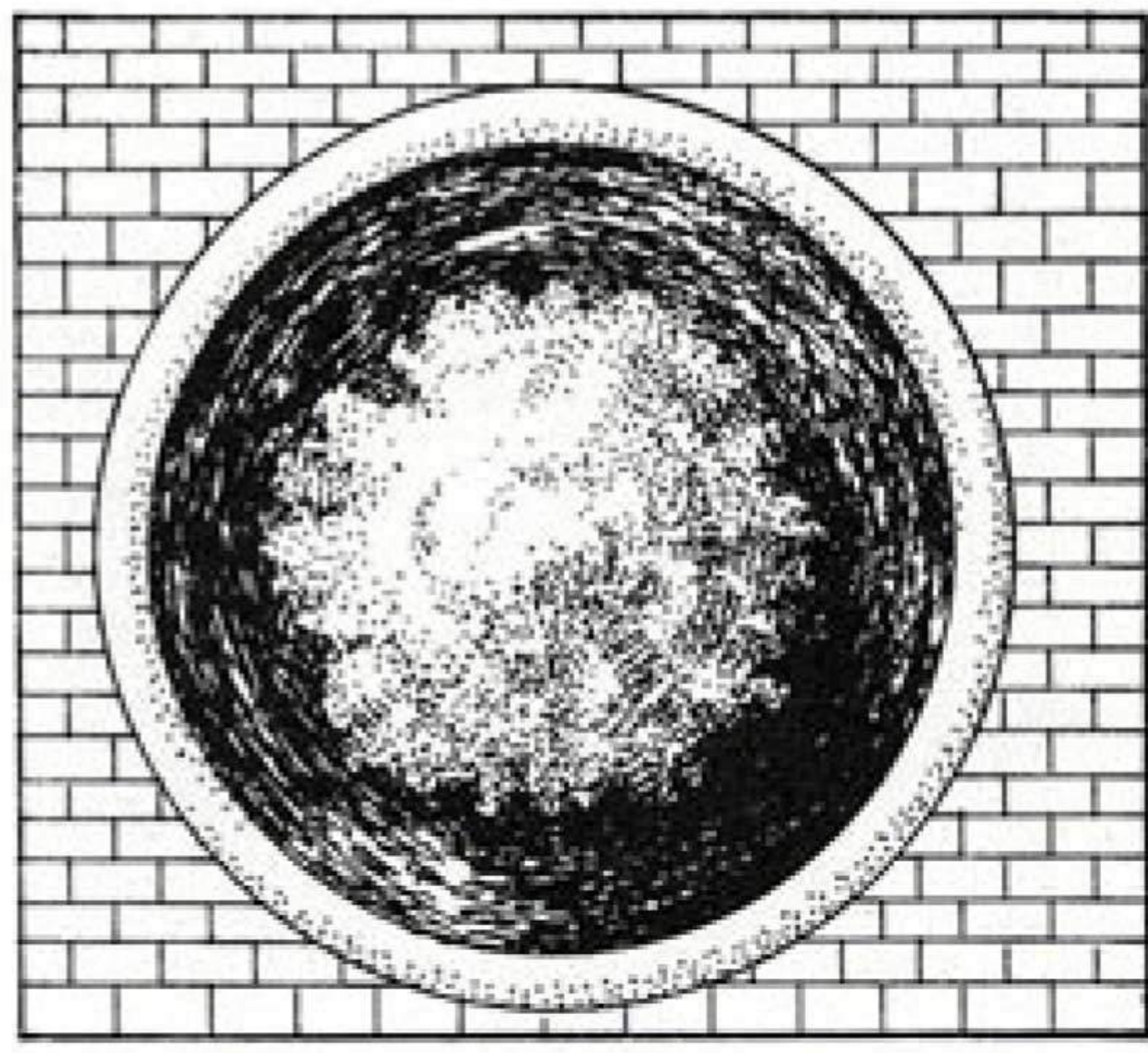
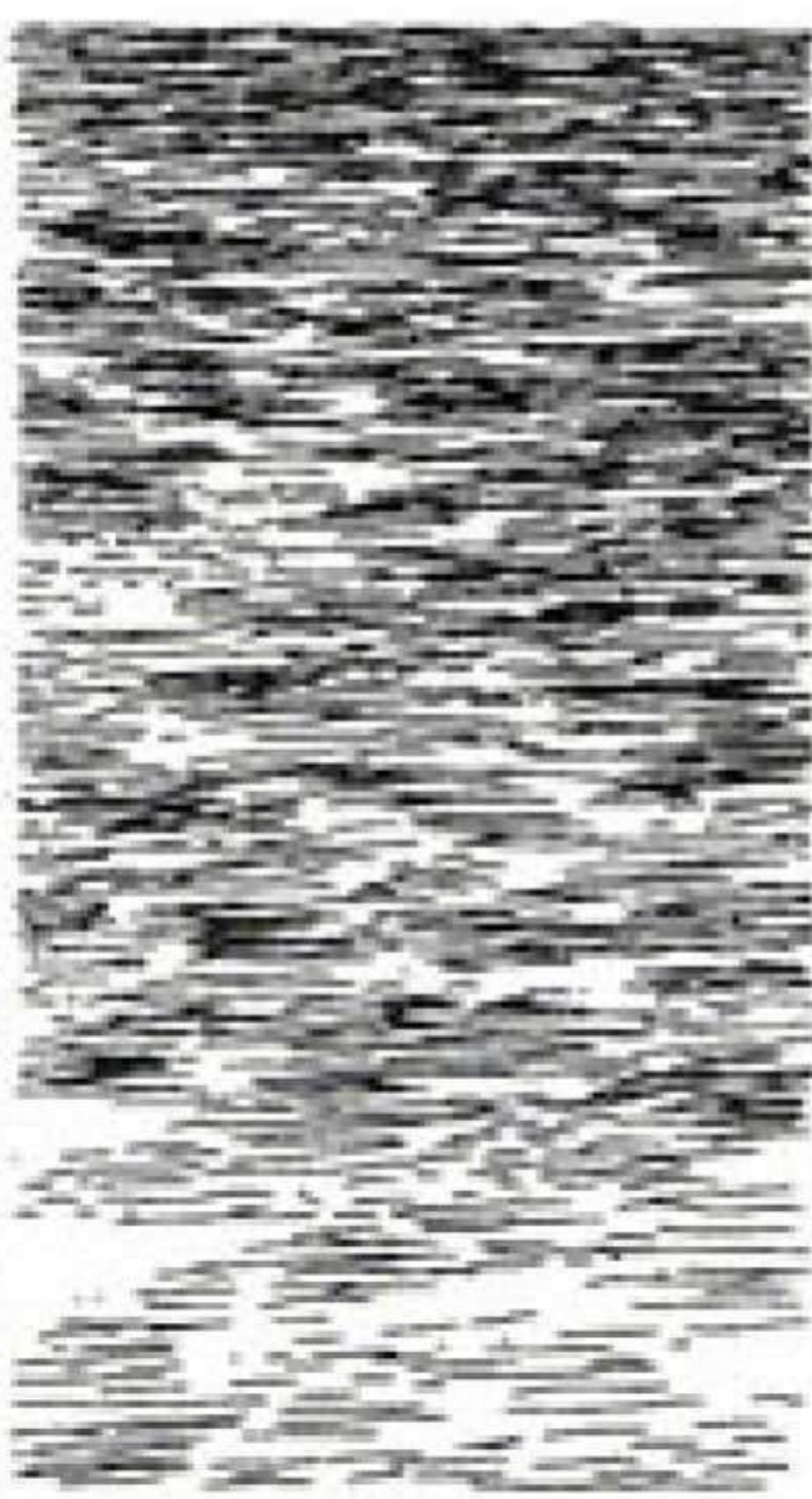
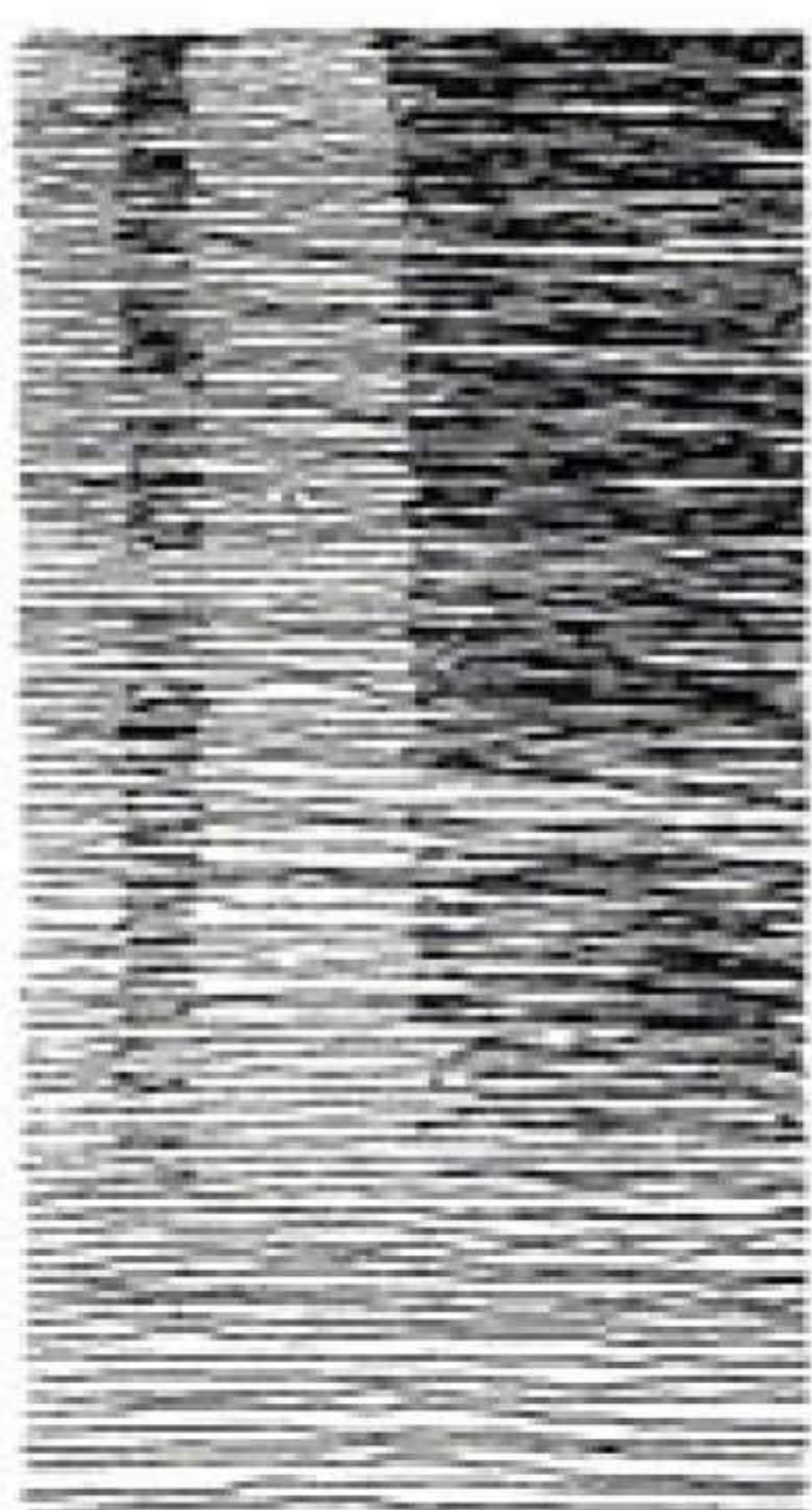
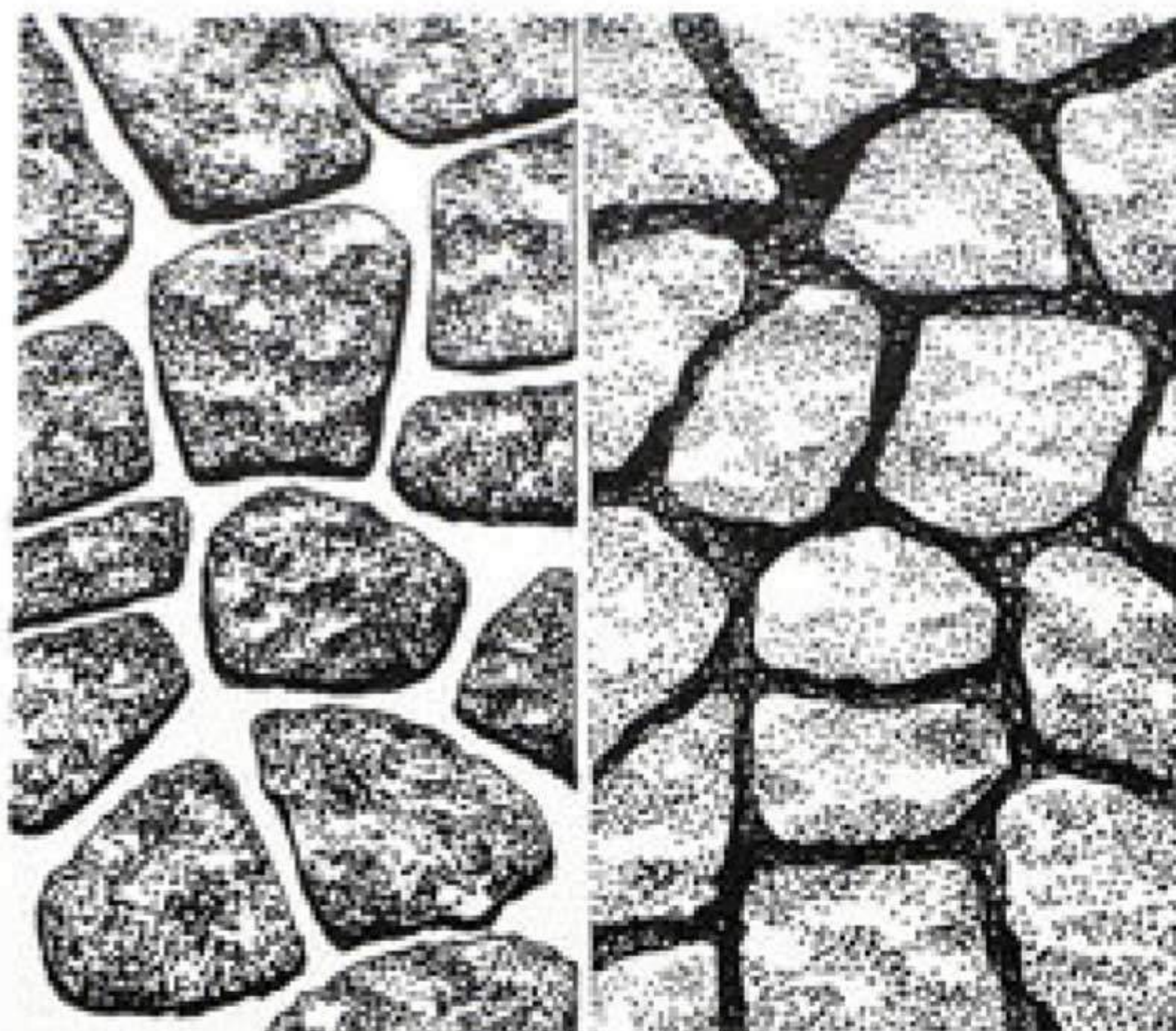
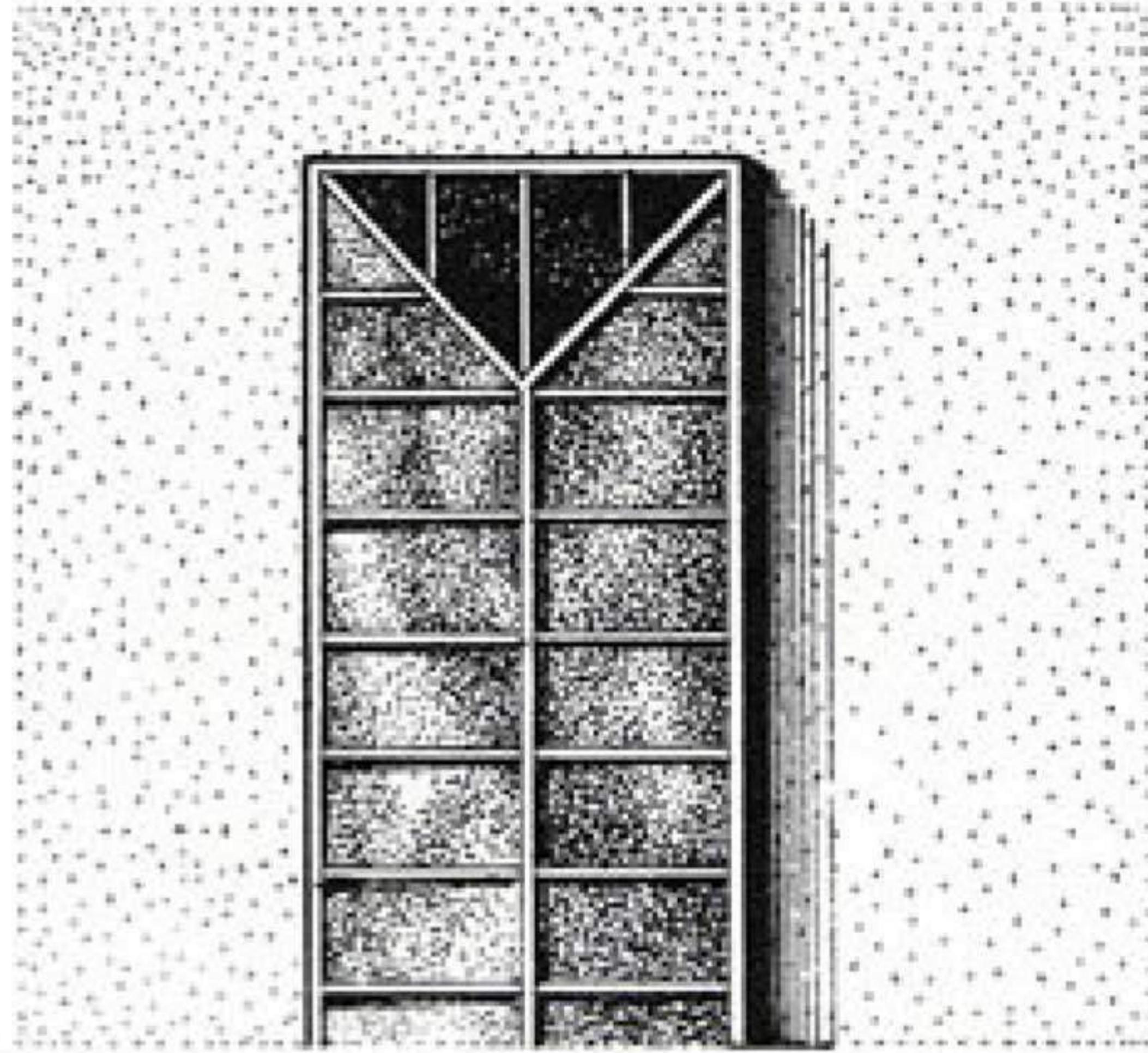
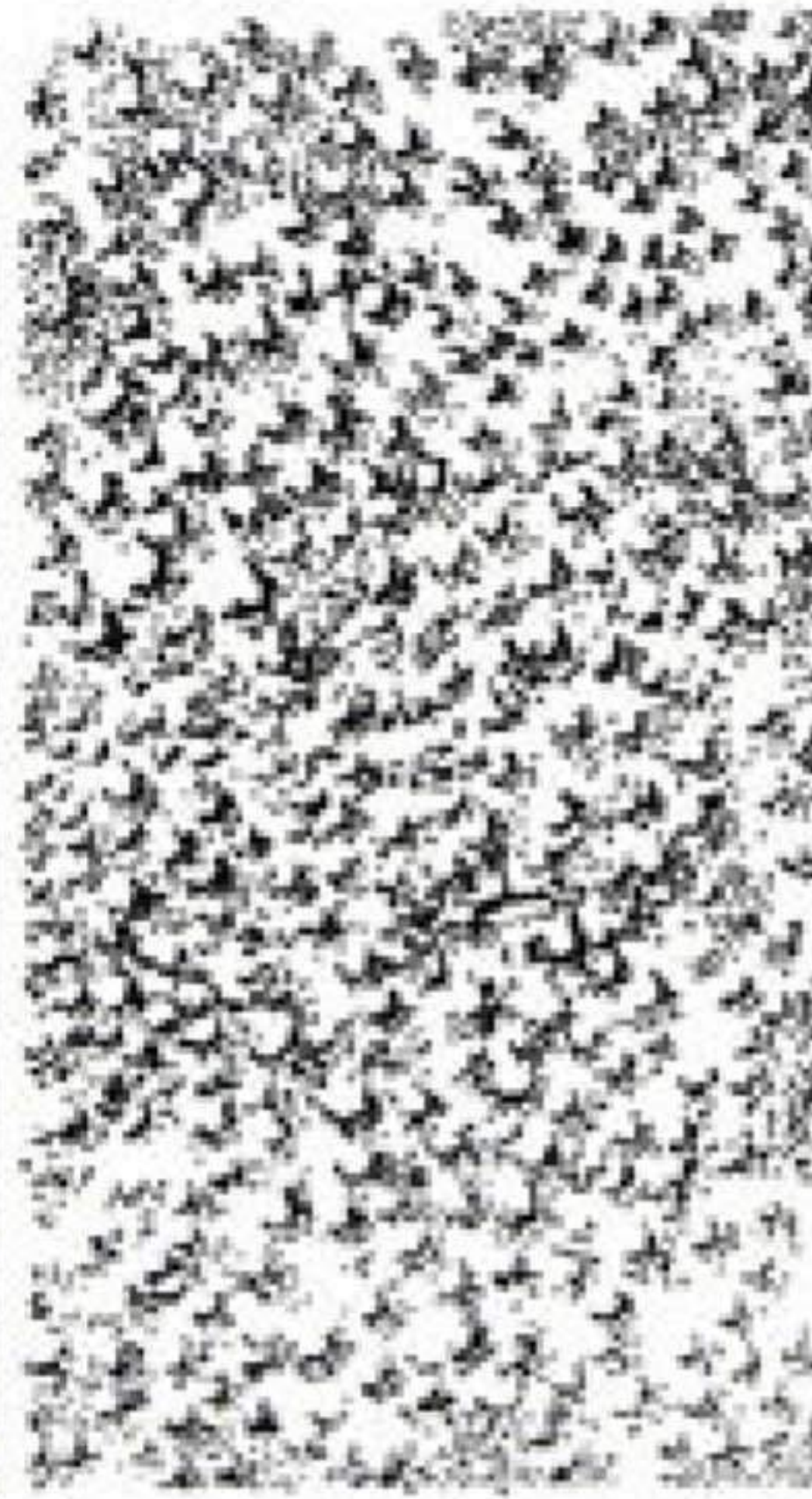
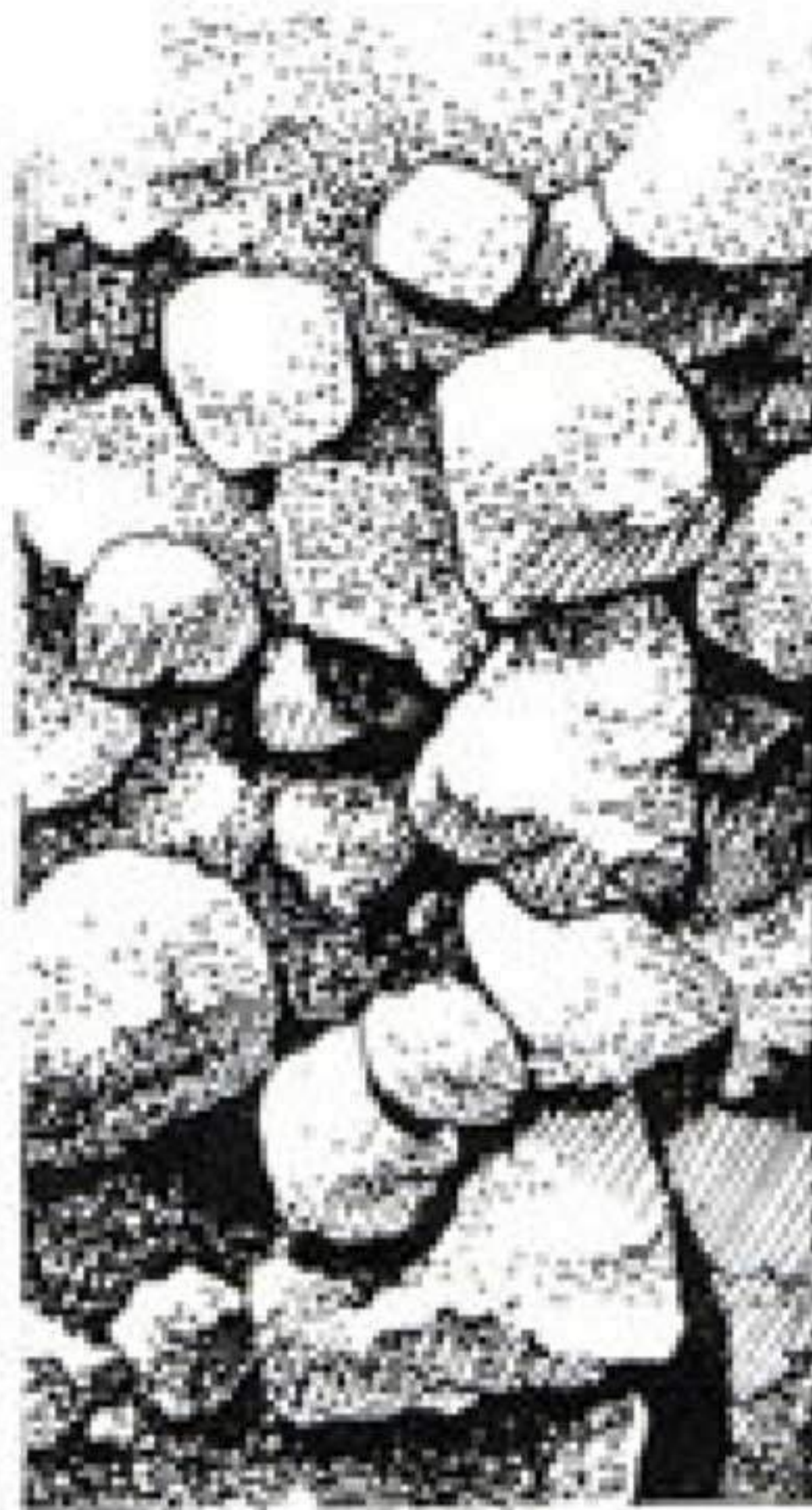
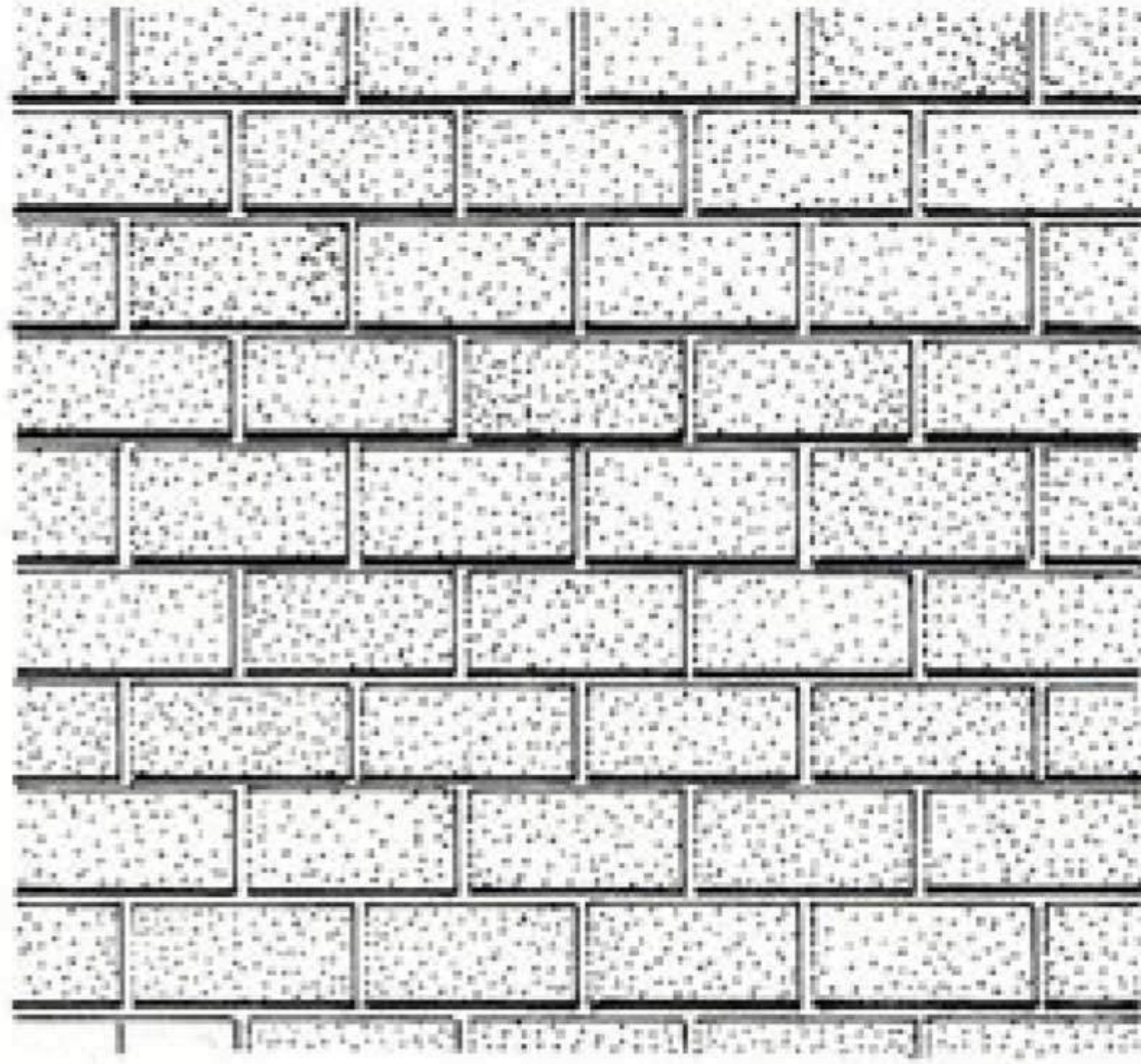


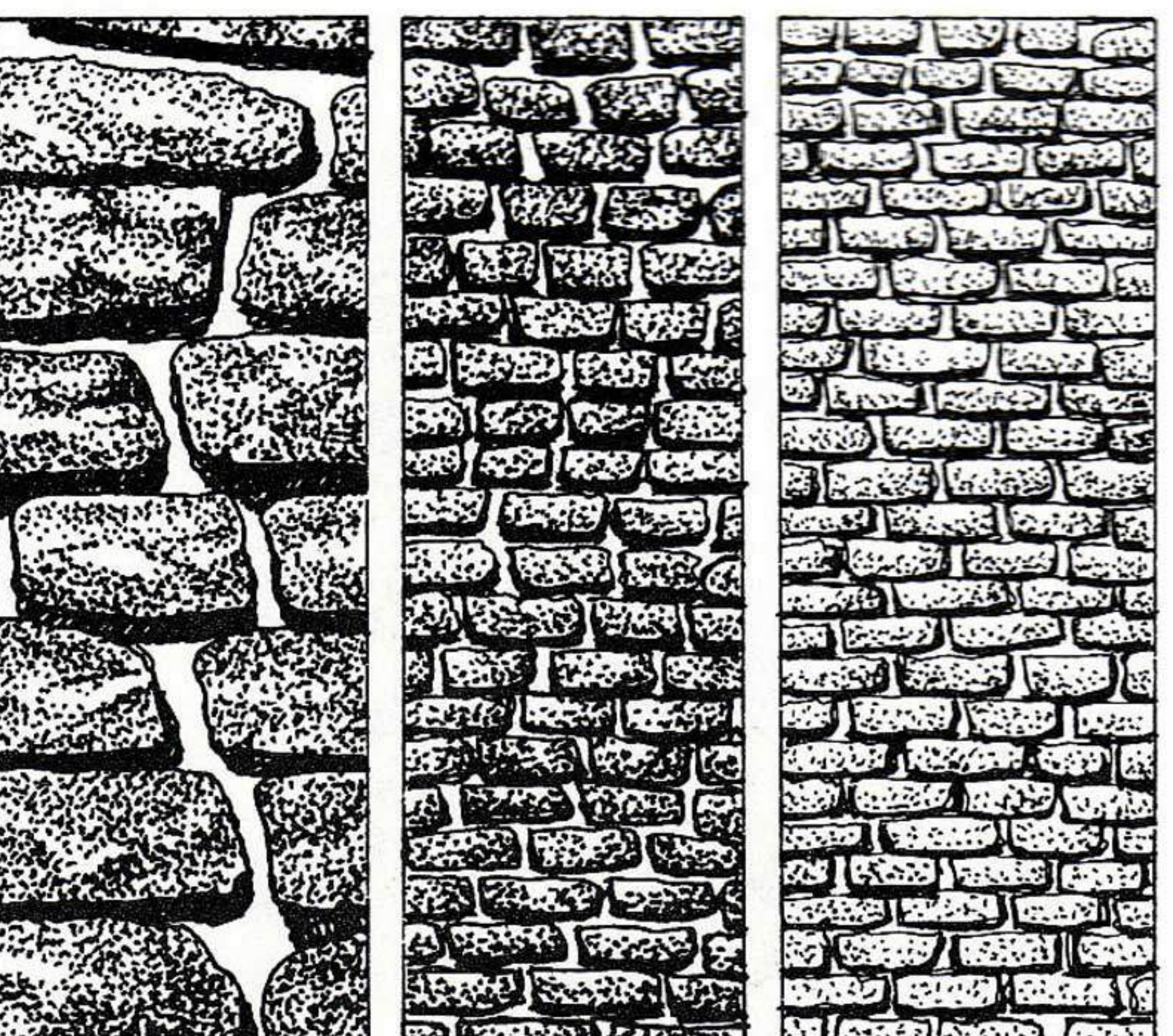
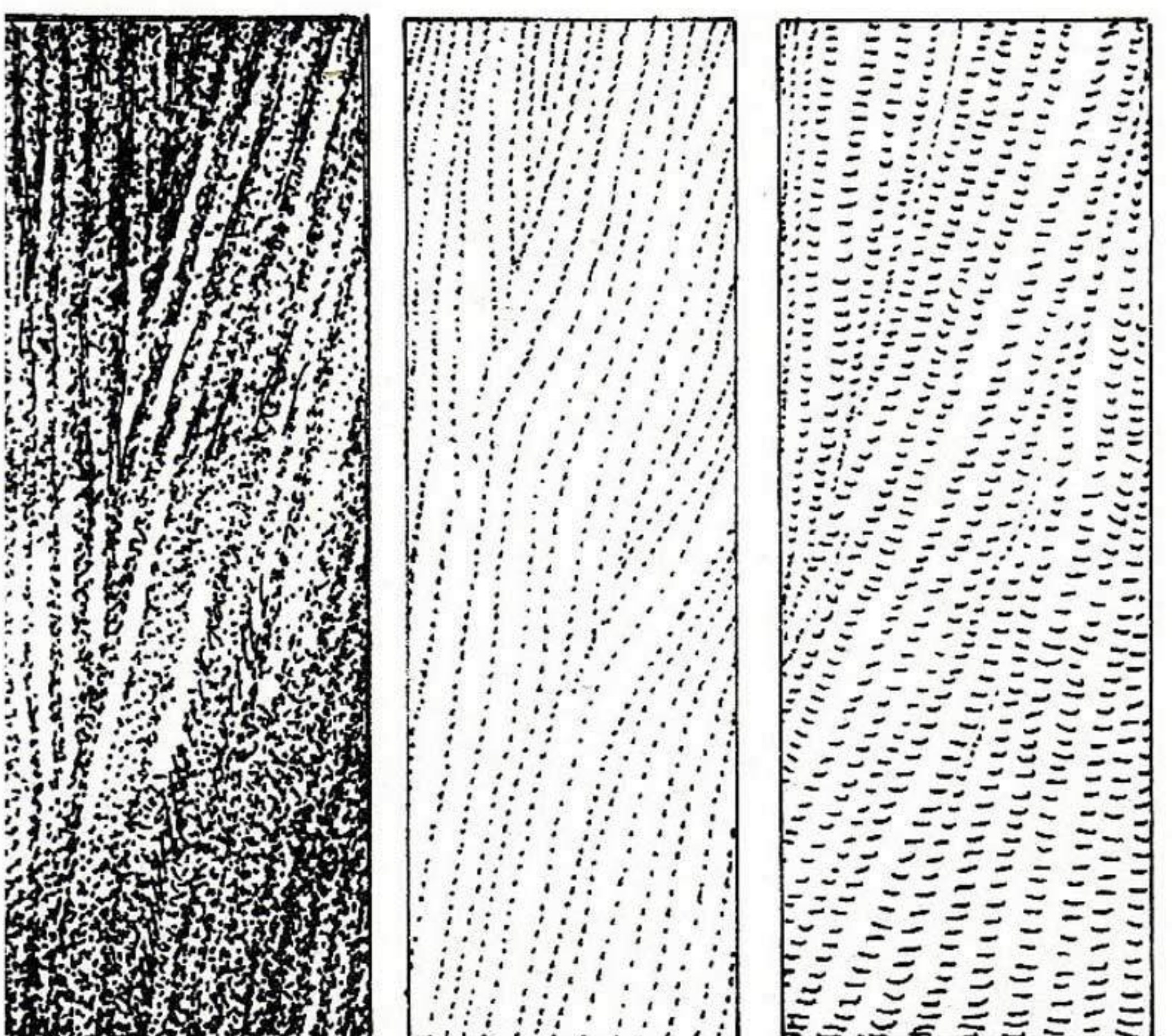
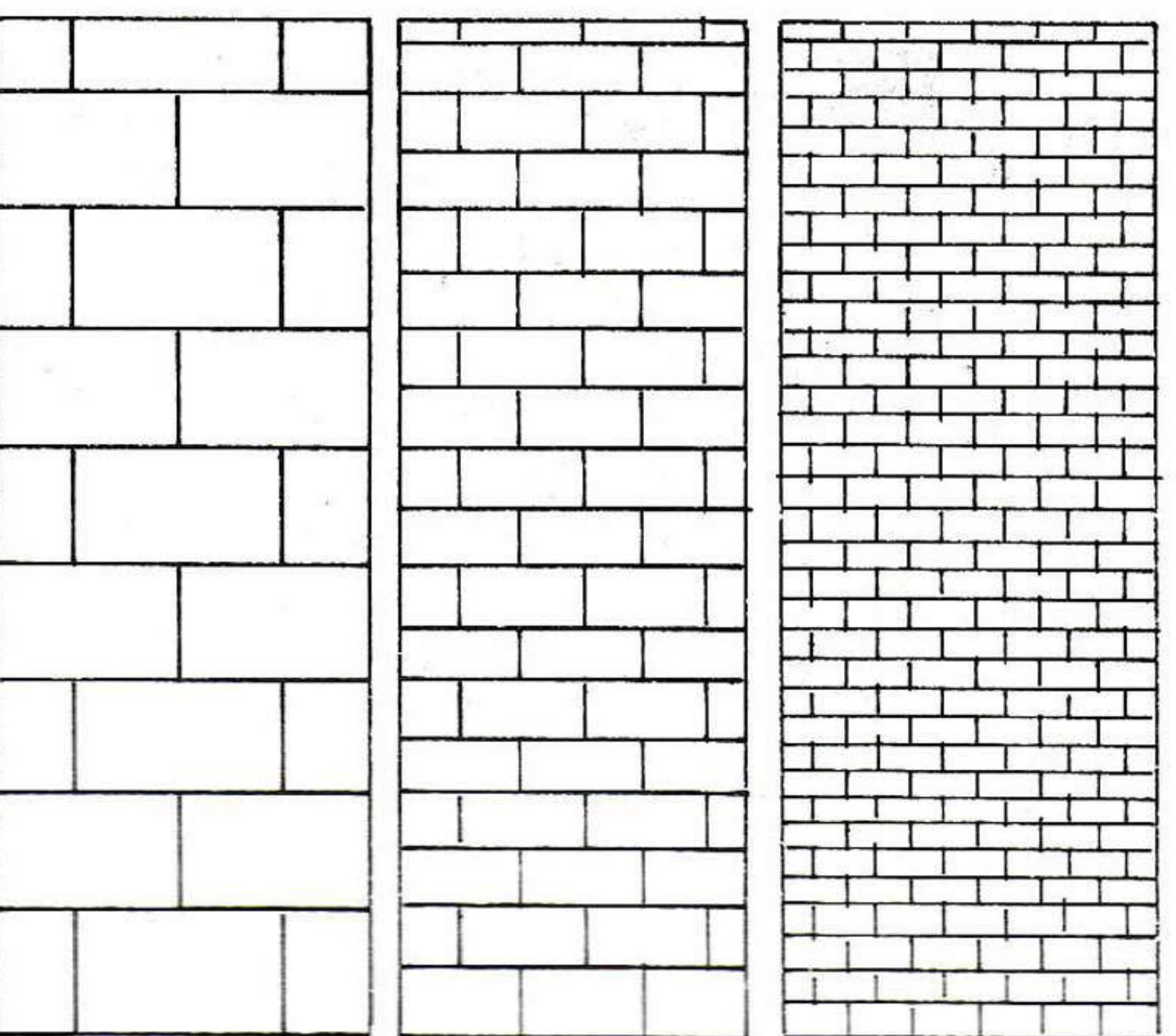
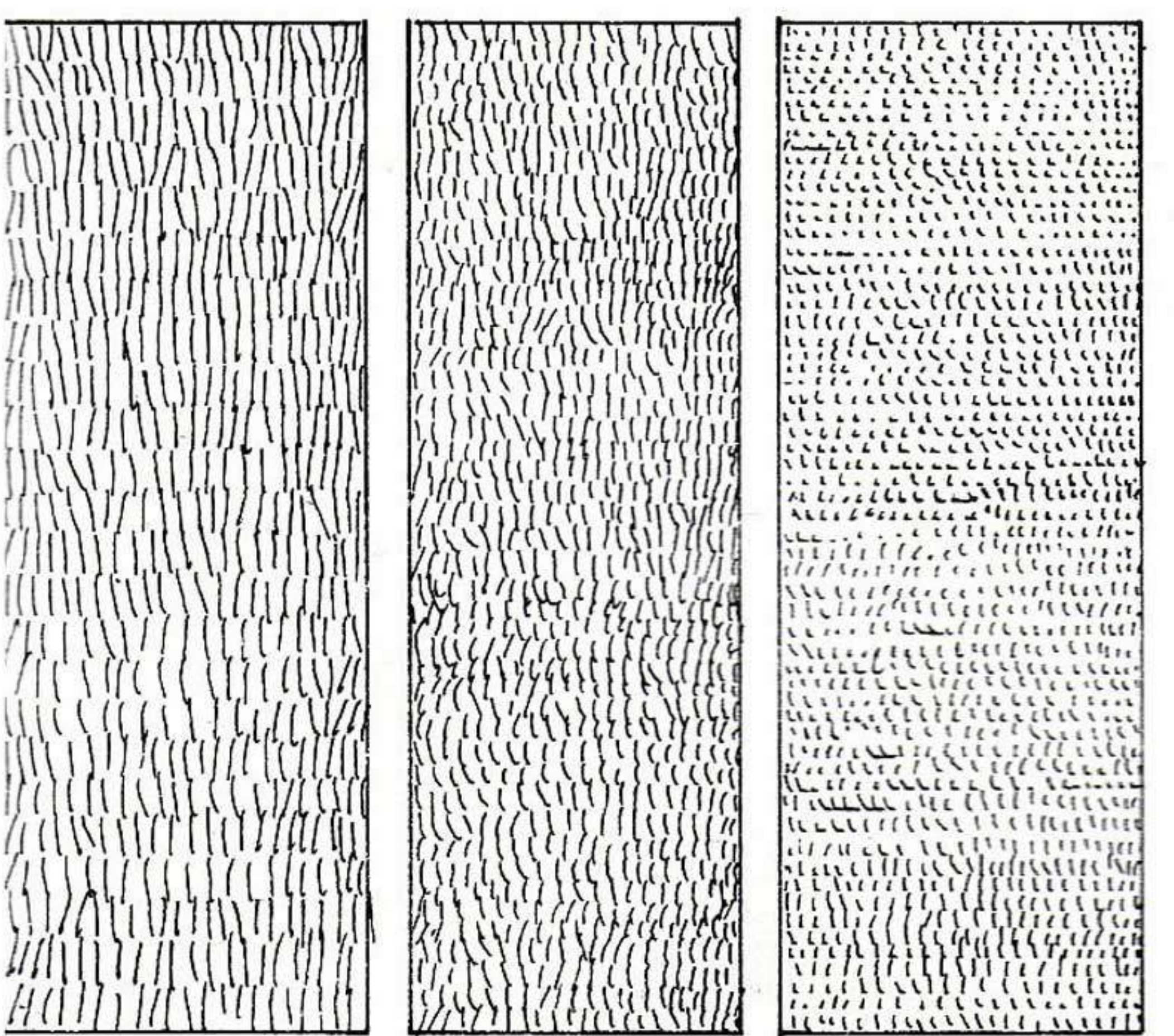
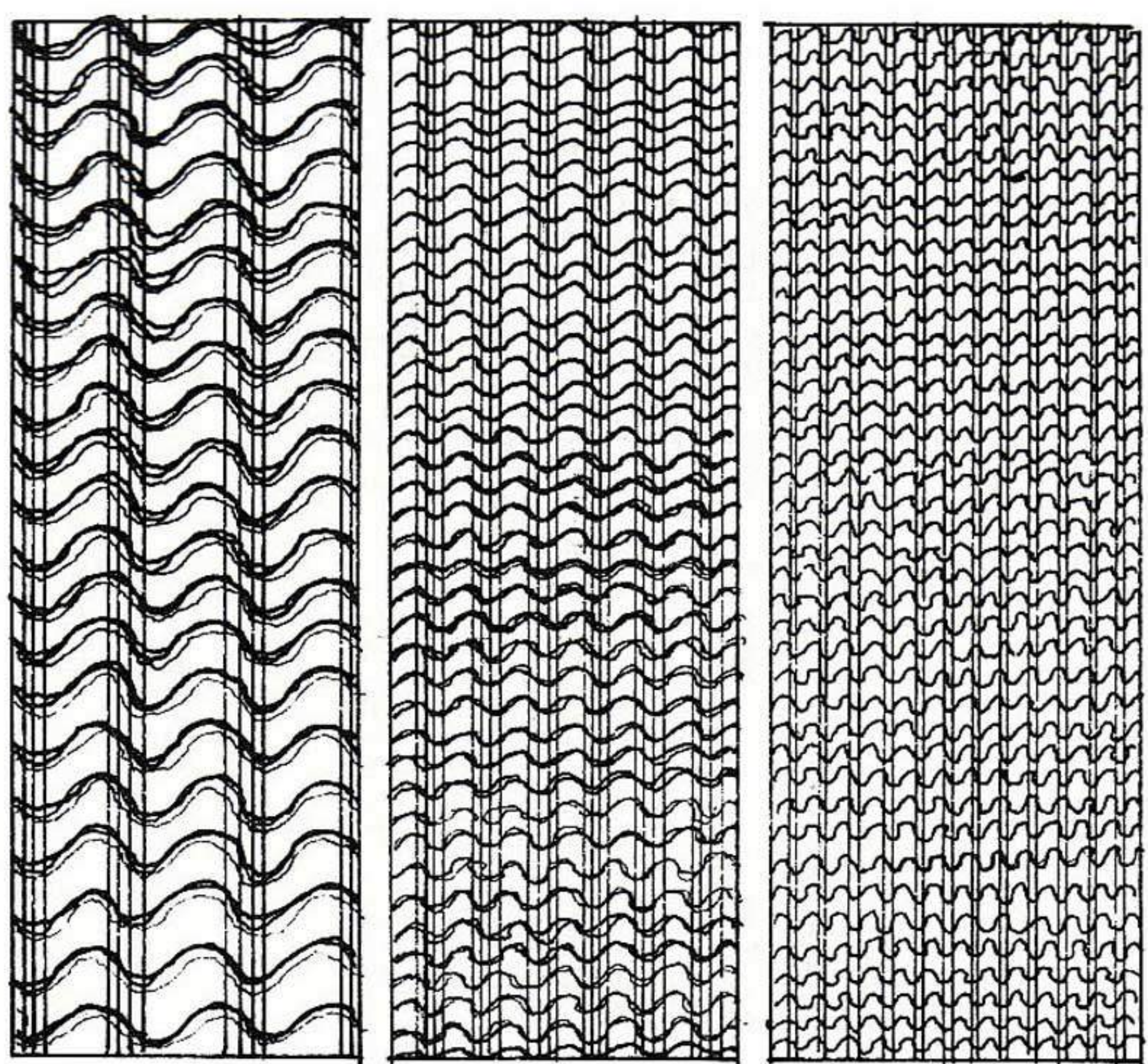
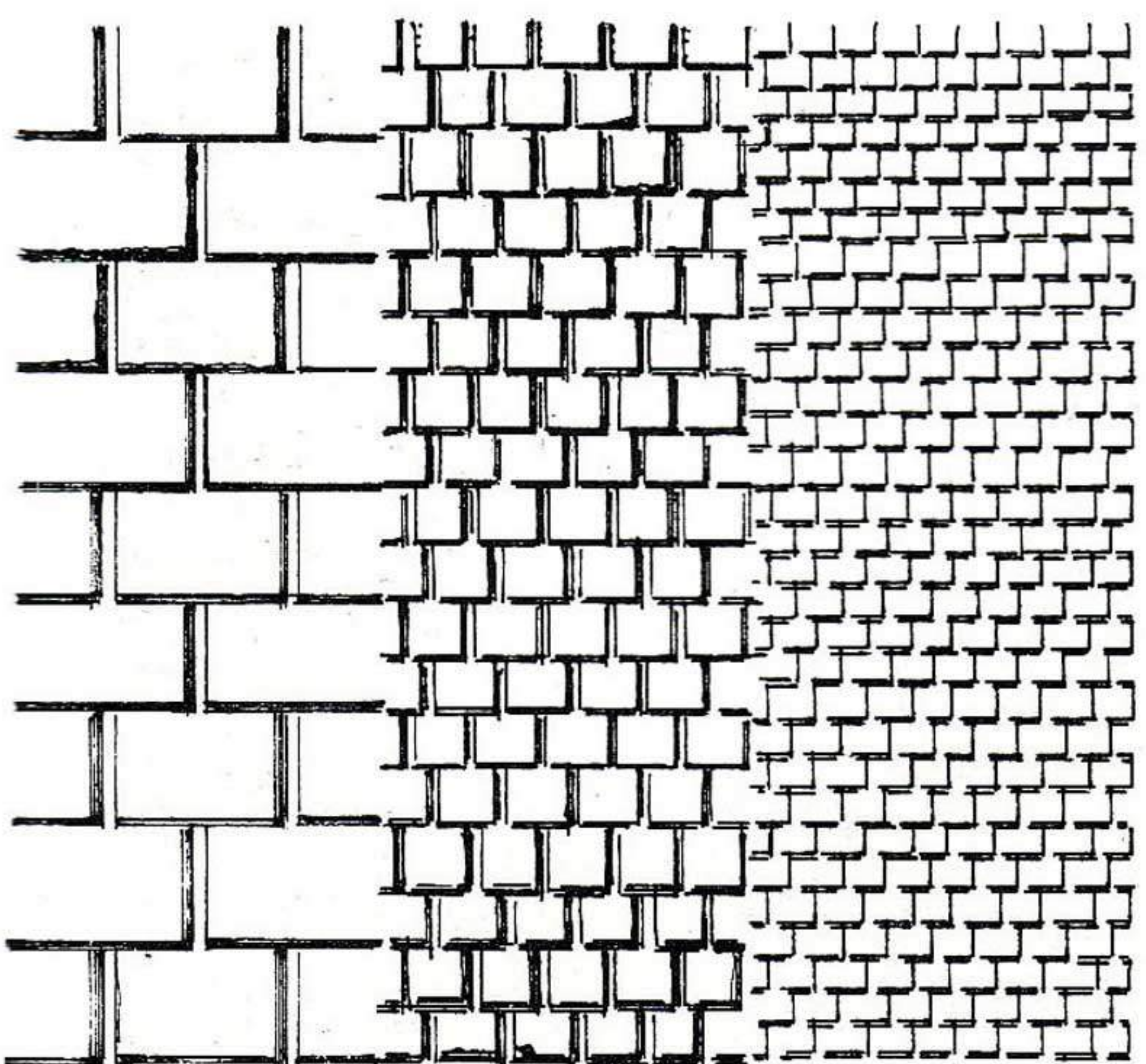
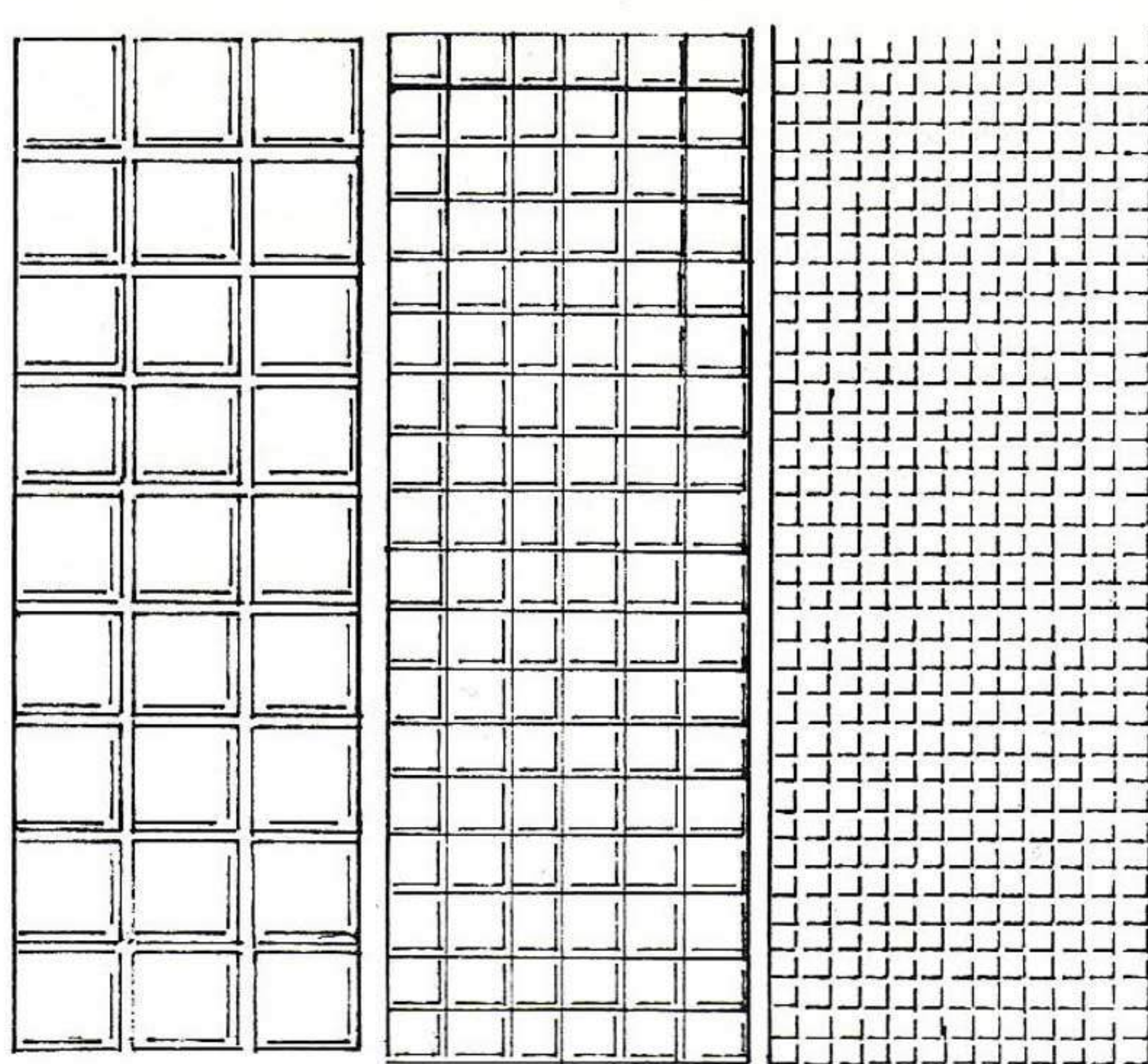
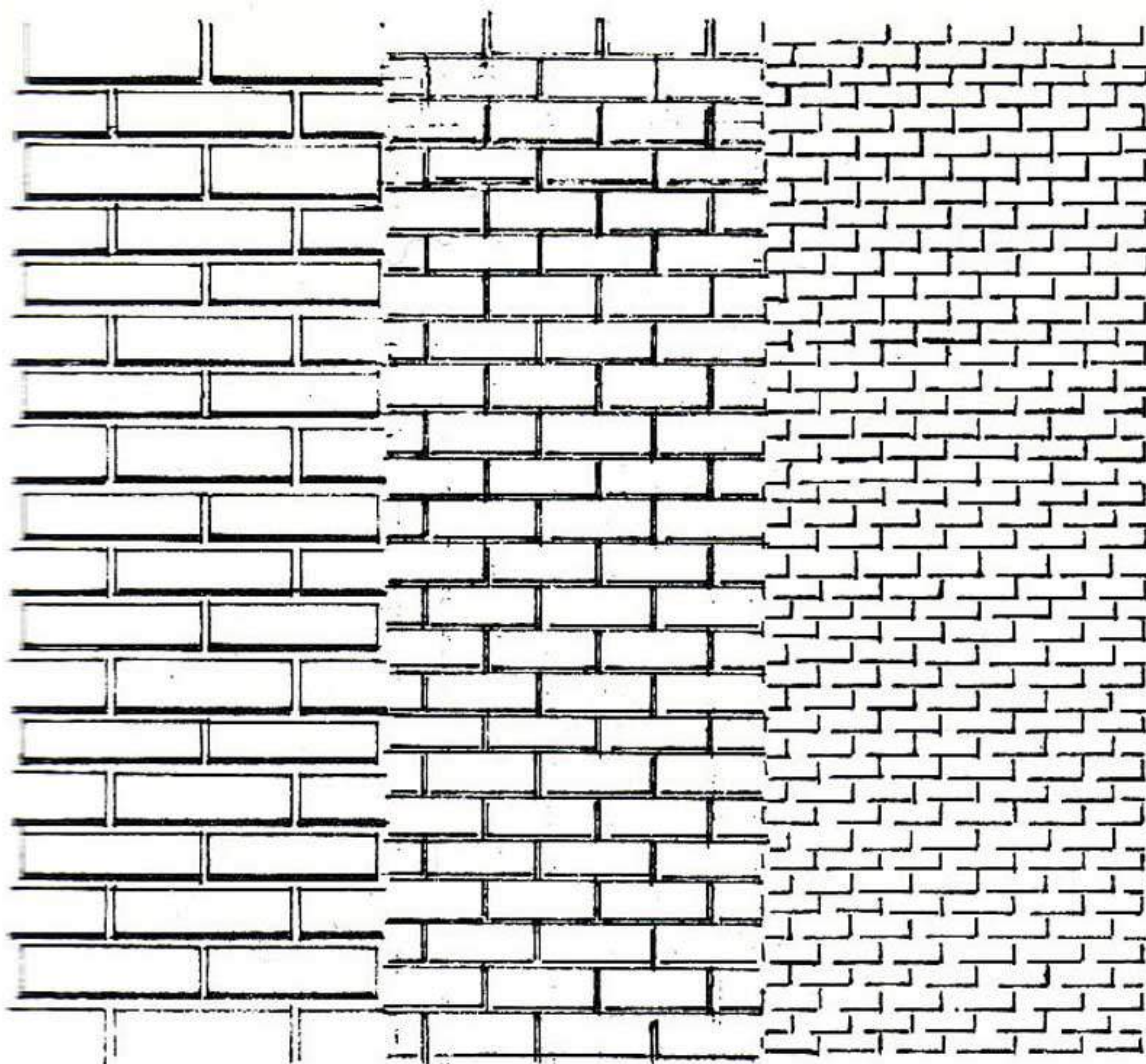
Flooring

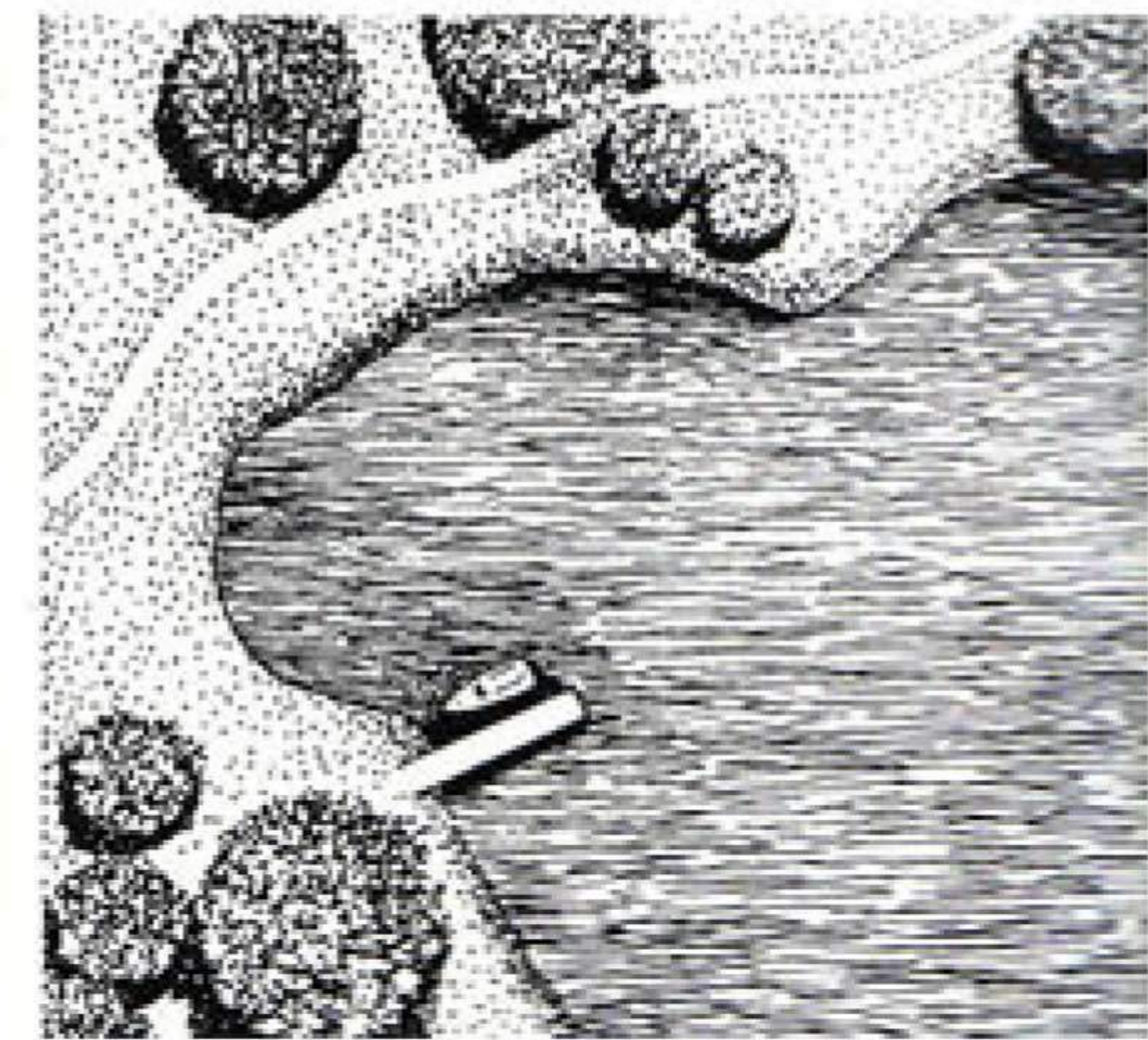
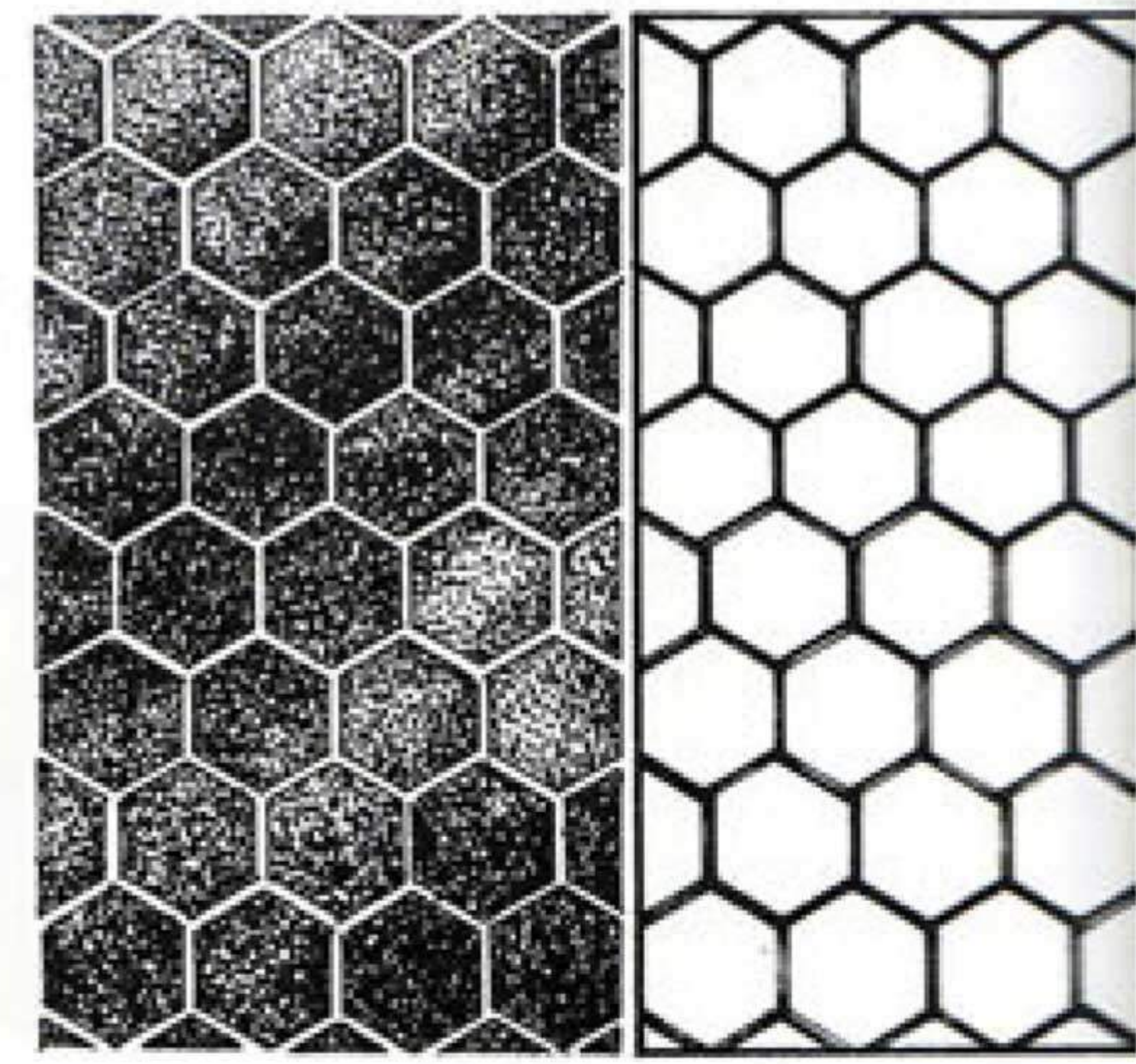
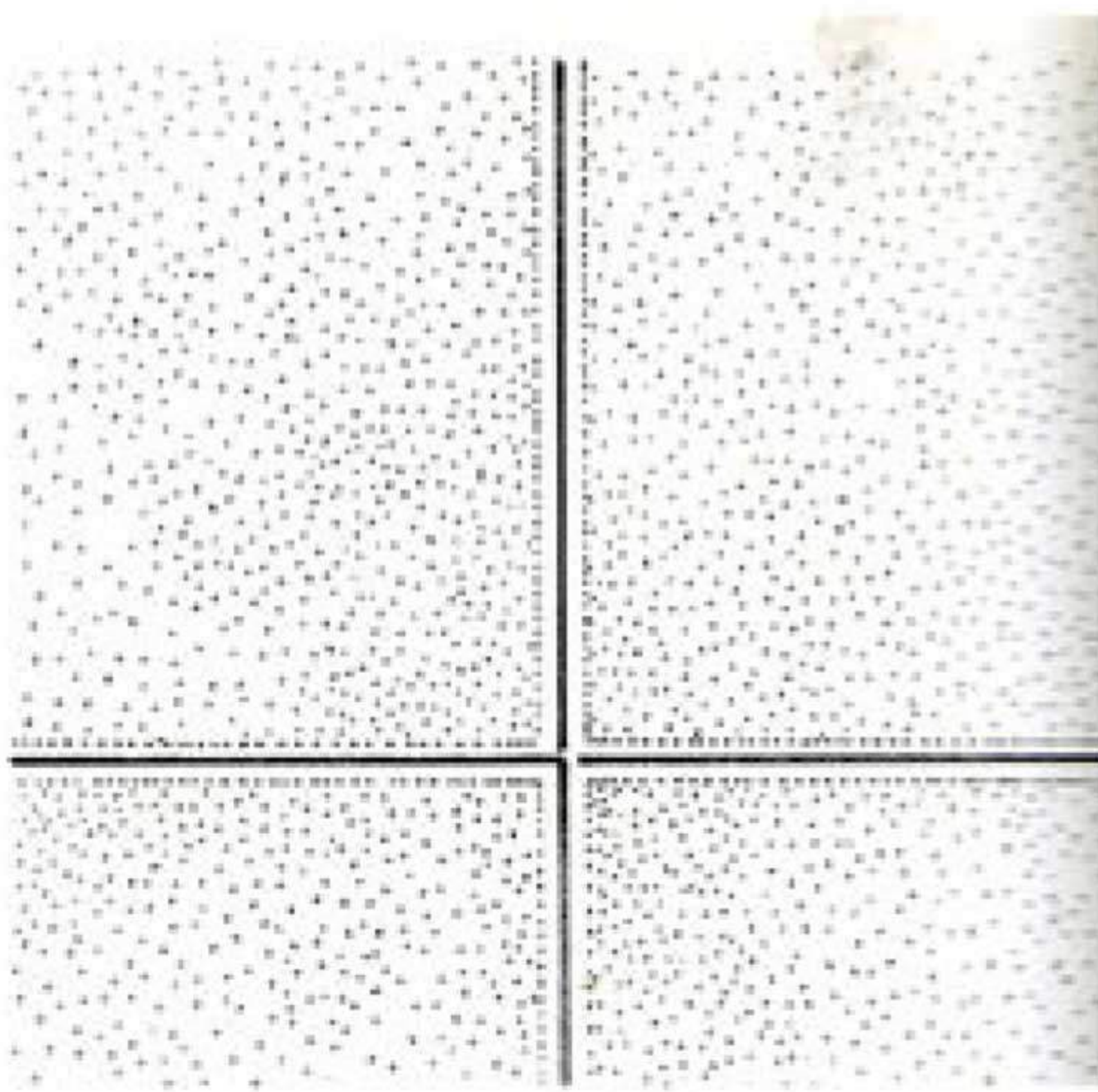
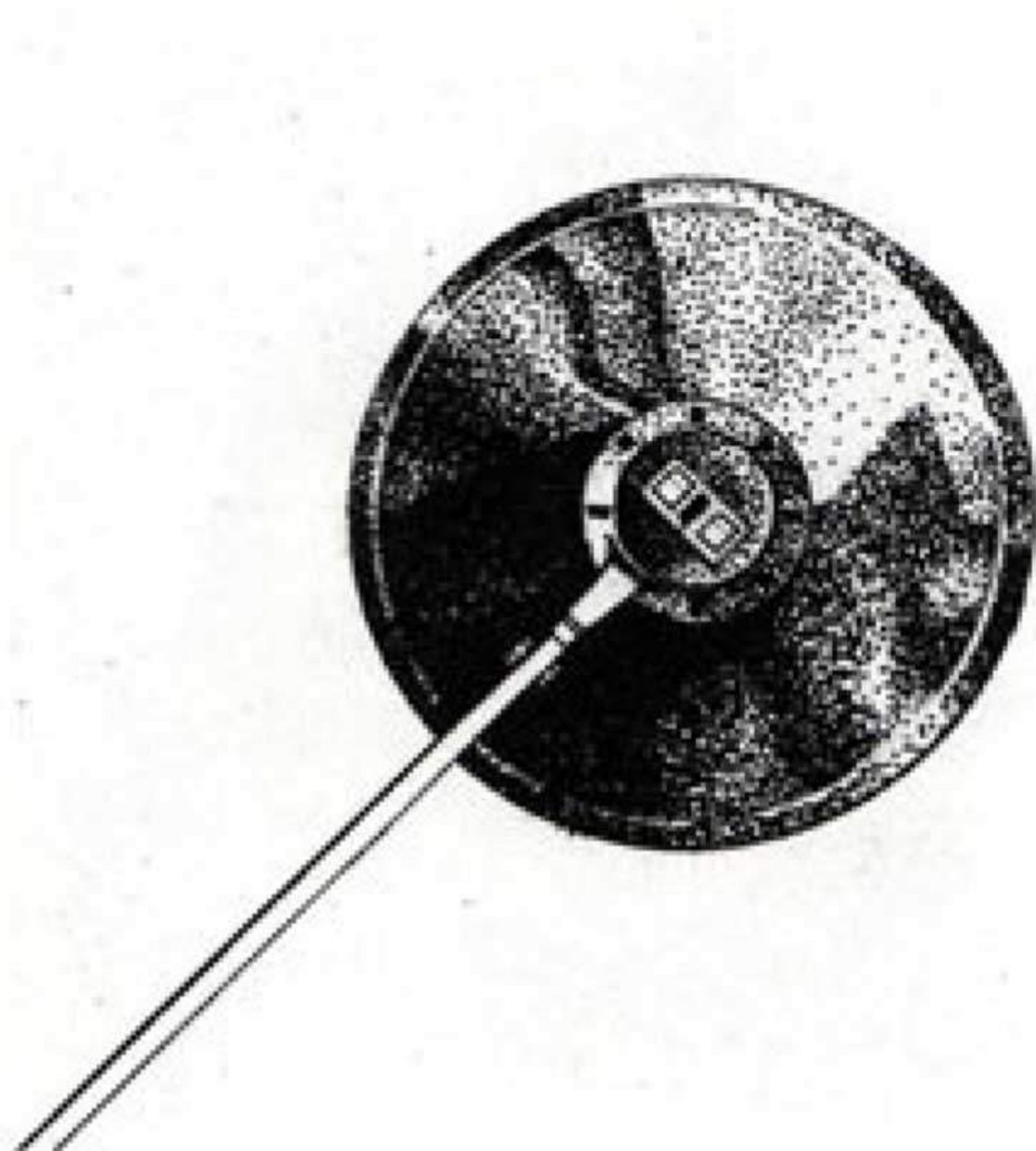
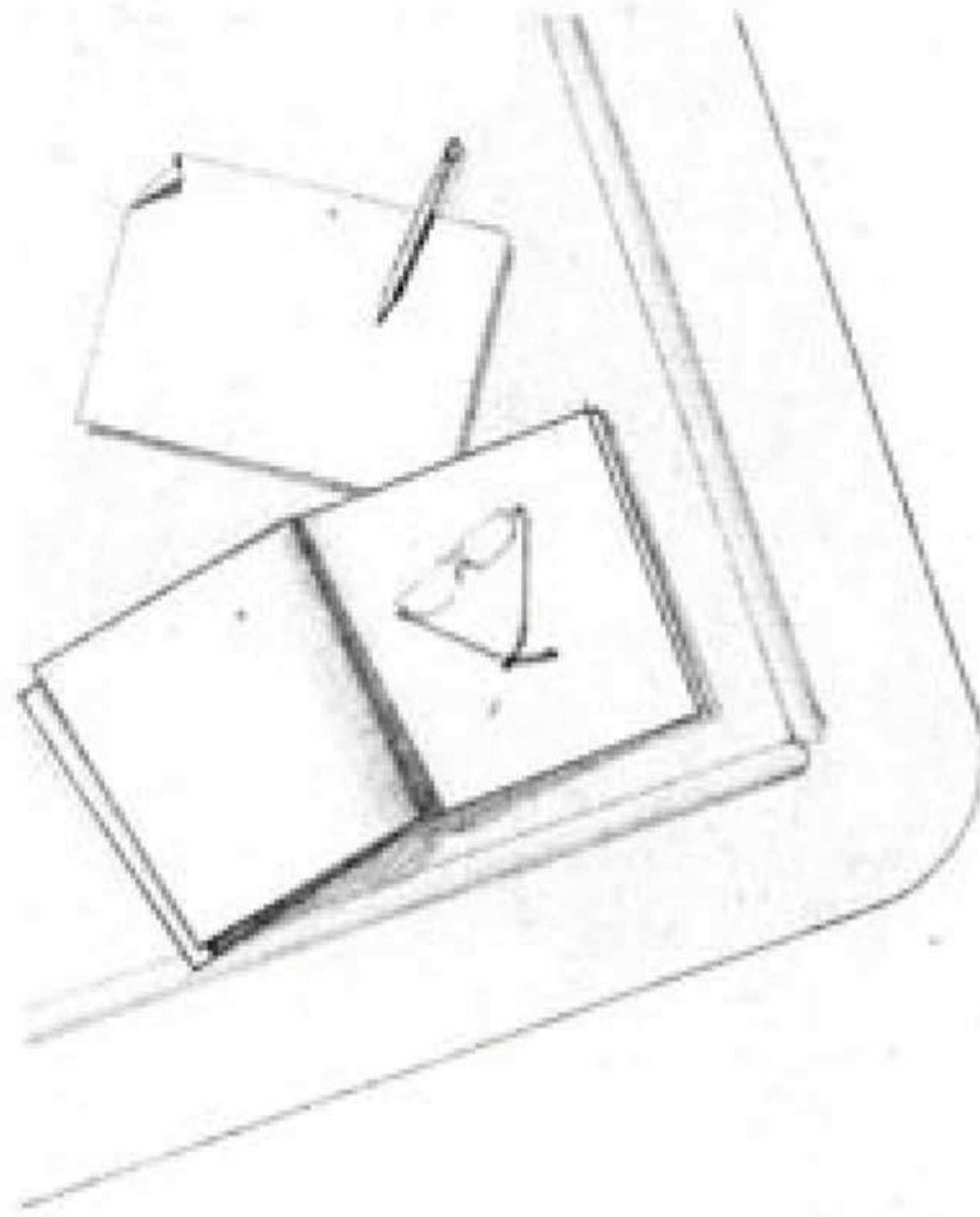
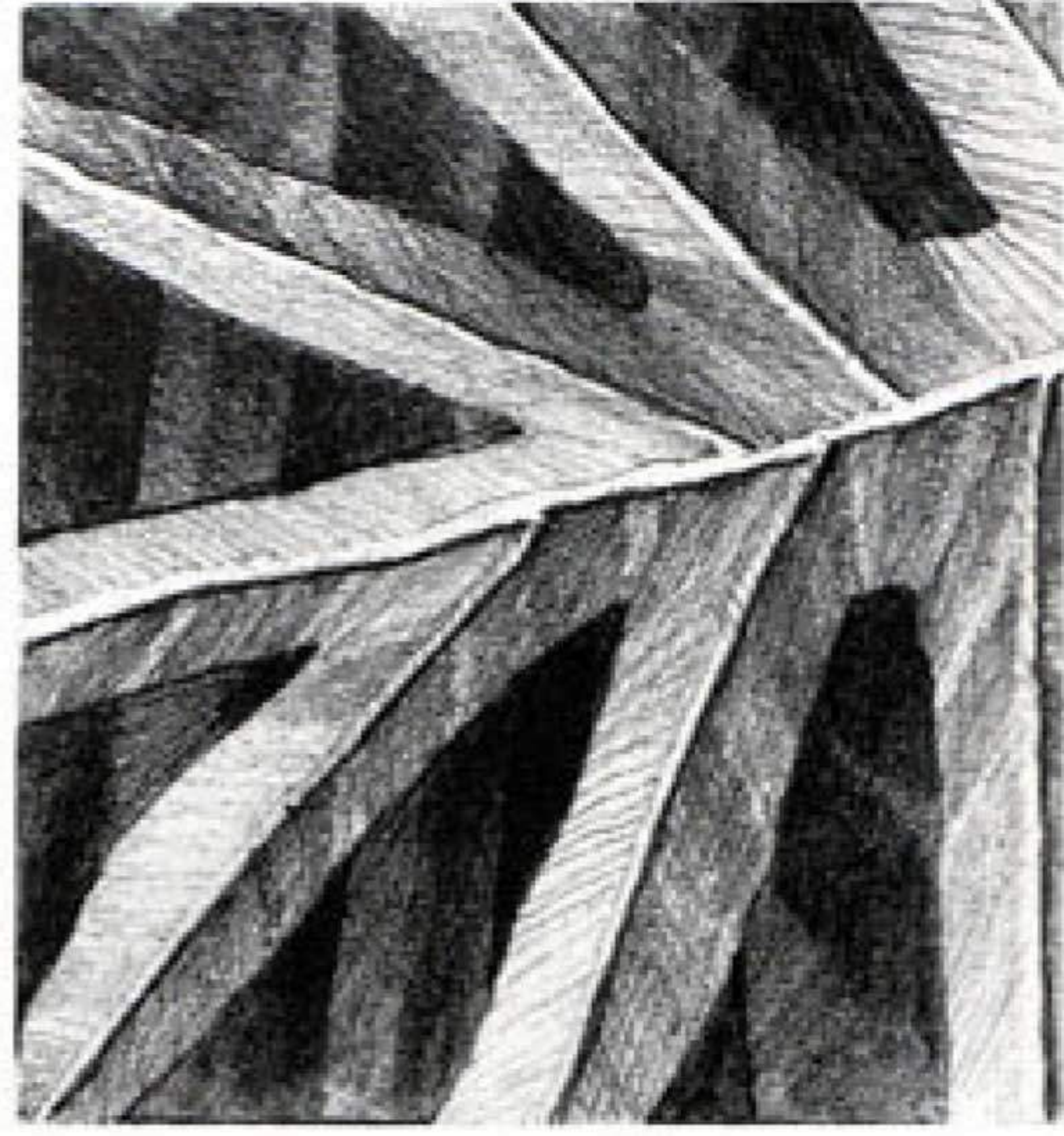
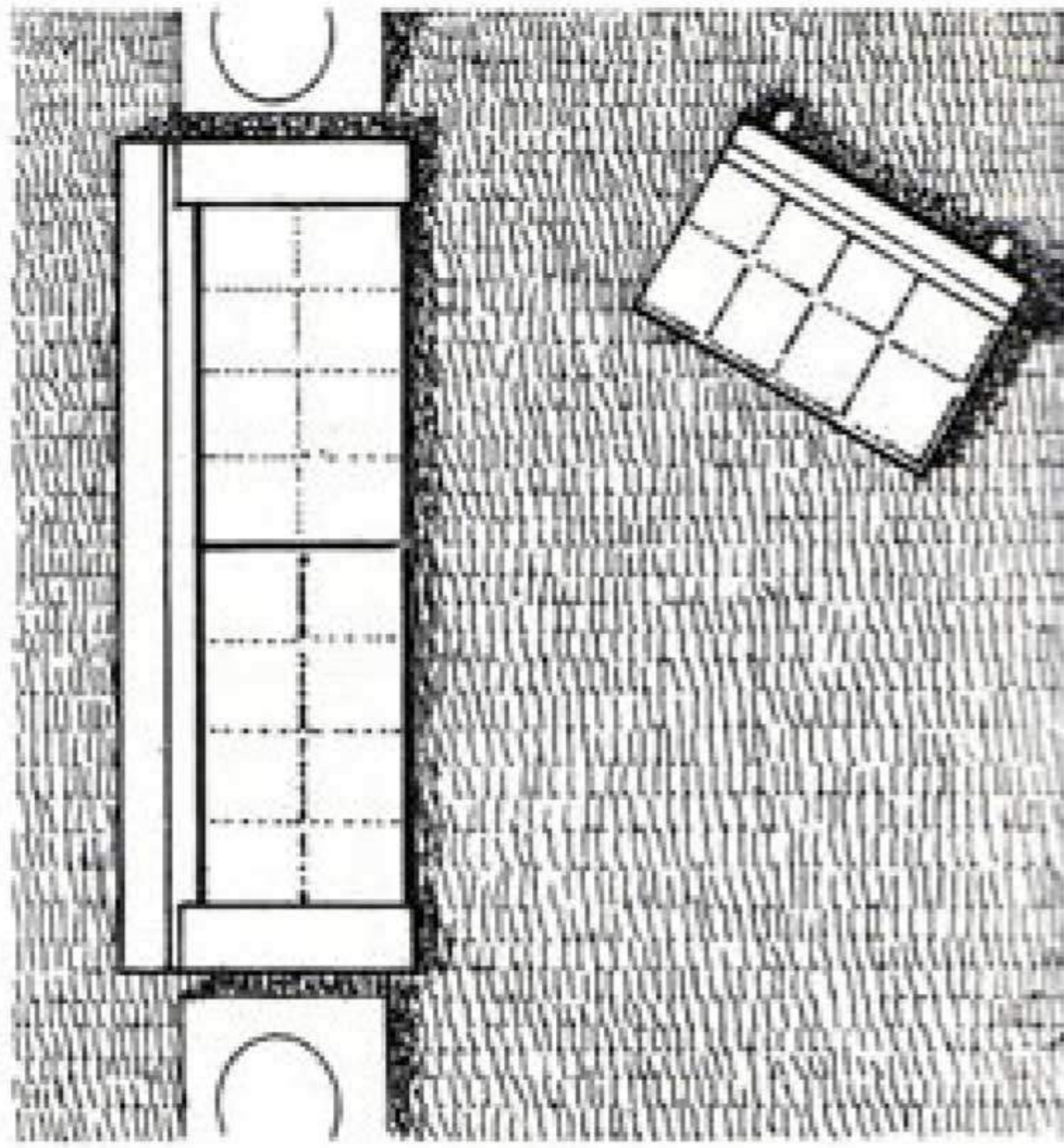


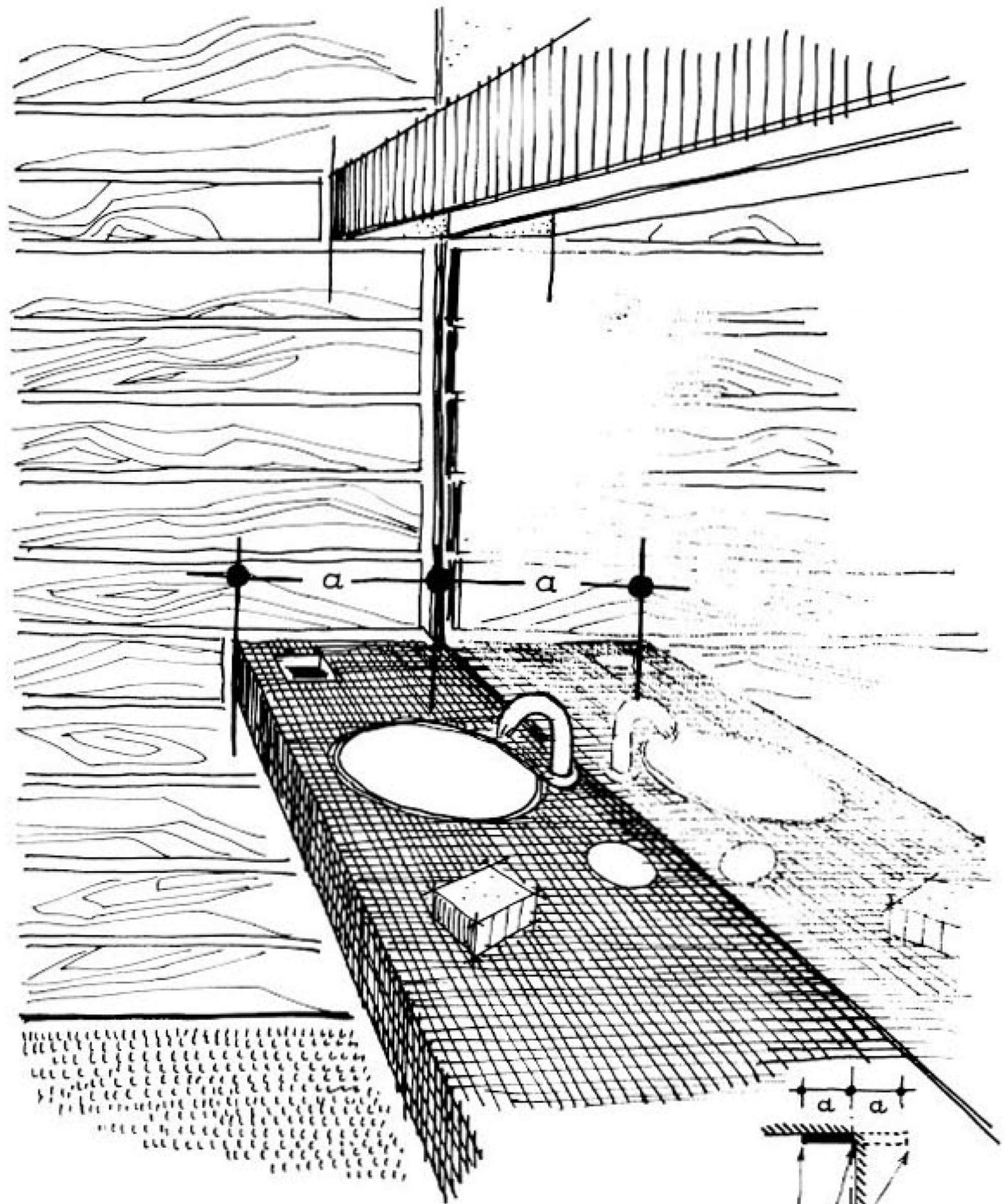










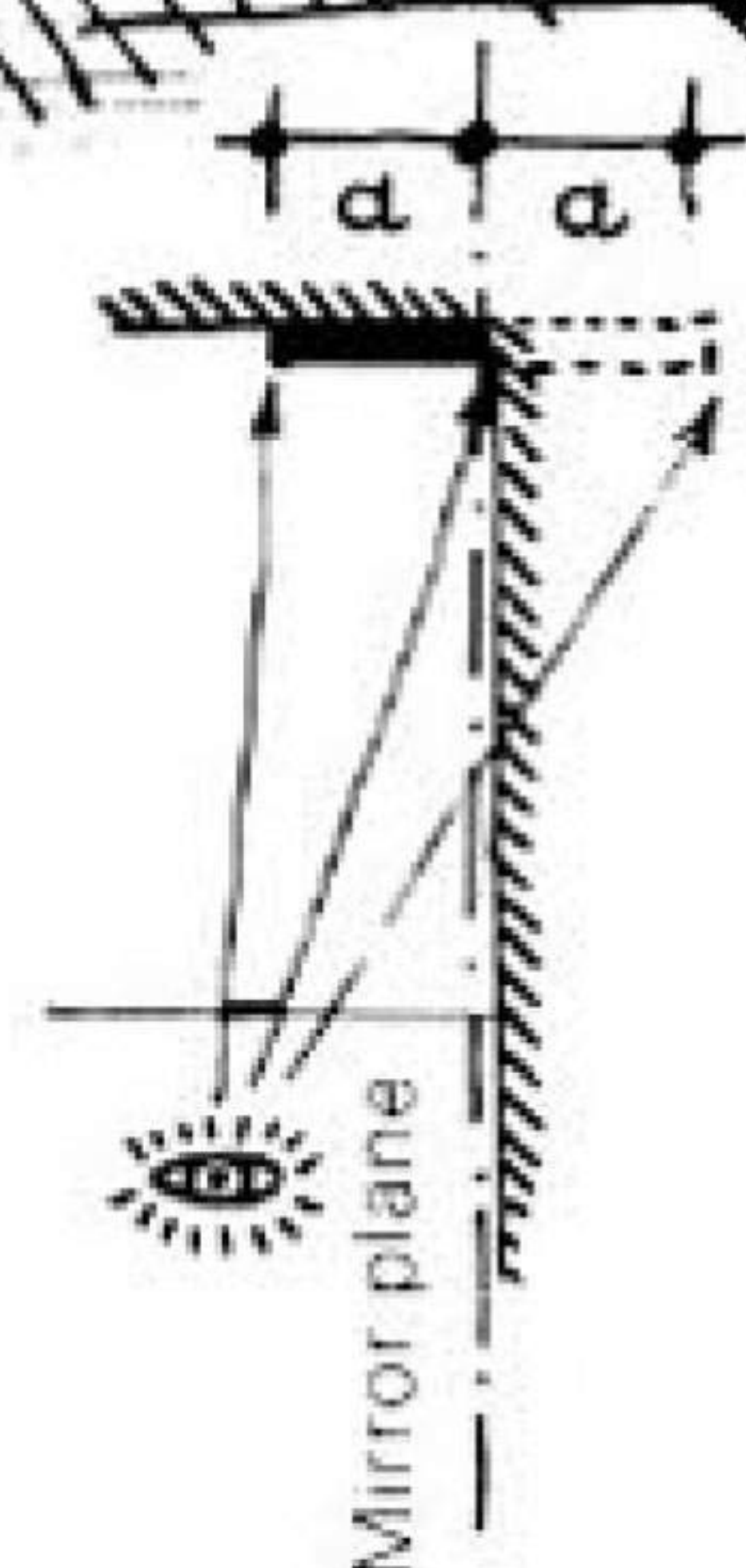


8.3.9 Reflections

Mirrors produce a true to life image turned about the mirror's axis; in other words, the mirror's surface reproduces things in their natural dimensions and distances in relationship to the given plane of the mirror.

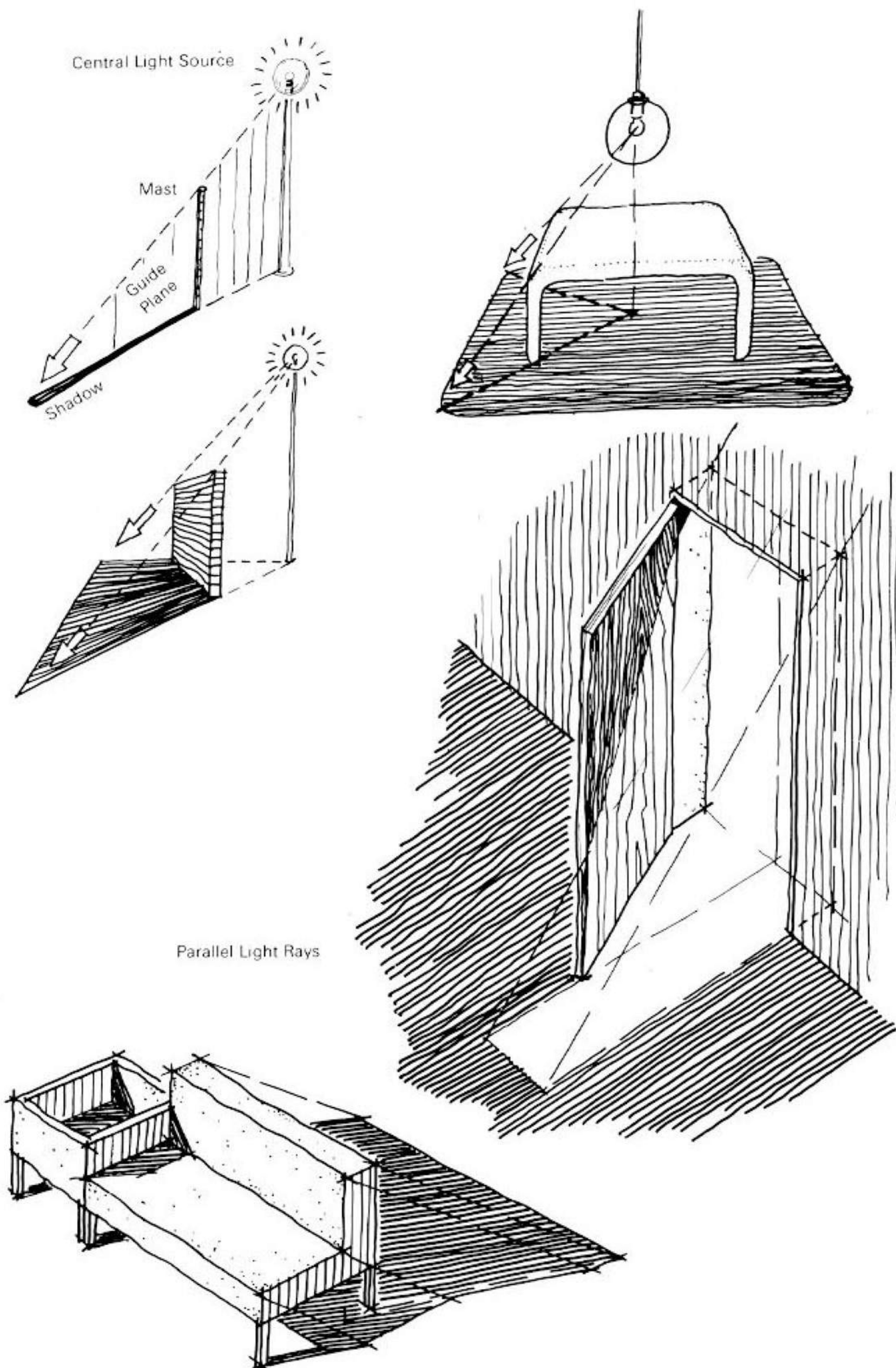
Please note that a scene and its mirror image have a common vanishing point.

Reflection—Mirror on Wall
(vertical mirror plane)



Drawing Terrain





Special Case—Cast shadow on glazed surfaces:

Depending on the direction of illumination, glazed areas appear as light or dark surfaces on buildings seen from the outside, and must be drawn accordingly. As a general rule, in a very brightly lit facade the windows appear as dark areas (almost hole-like). A similar approach applies to a glazed area or window only partly lit by the sun and which thus lies partly in shadow.

